

California Air Resources Board

Navigation Bar

Identification of Performance Standards for Existing Stationary Sources

A Resource Document

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Under the California Clean Air Act, districts are to develop plans to attain the State ambient air quality standard for ozone by the earliest practicable date. In this area of the website, we summarize in question and answer format, the process underway to assist the districts in updating their plans to ensure inclusion of "every feasible measure." We also include [summary tables](#) which identify the performance standards for the first set of stationary source categories reviewed. For questions or comments or to request a hardcopy, please contact Jon Pederson at (916) 327-5981 or e-mail at jpederso@arb.ca.gov.

TABLE OF CONTENTS

I. INTRODUCTION AND BACKGROUND

II. EVERY FEASIBLE MEASURE

1. What is the [definition](#) of *every feasible measure*?
2. Why doesn't the Air Resources Board publish an *every feasible measure* [list](#)?
3. How do the [RACT/BARCT](#) requirements of the California Clean Air Act interface with the *every feasible measure* requirement?
4. Which [districts](#) have California Clean Air Act plans that include *every feasible measure*?

III. IDENTIFICATION OF PERFORMANCE STANDARDS

1. Which stationary source [categories](#) were evaluated for performance standards?
2. What [process](#) did we use to identify the performance standards?

IV. USE OF THE RESOURCE DOCUMENT

1. What is the [benefit](#) of having this resource document?
2. How can the [districts use](#) the performance standards data?
3. How can the [ARB staff use](#) the performance standards data?

V. PUBLIC OUTREACH AND PROCESS FOR UPDATING DATA

1. What [public outreach](#) efforts were conducted to share the data with stakeholders?
2. How will this information be [kept current](#)?
3. What [steps will be taken](#) to keep abreast of new technologies?

APPENDIX: IDENTIFICATION OF PERFORMANCE STANDARDS FOR EXISTING STATIONARY SOURCES

INTRODUCTION AND BACKGROUND

The Air Resources Board (ARB) is proud of the progress which has been made over the past 50 years by the State and local air pollution control and air quality management districts' (district) air quality programs. The air we breathe today is healthier and smog episodes are less frequent and severe. However, despite this progress, there is a continuing need to achieve additional reductions of pollutants, especially those which contribute to ozone (volatile organic compounds and nitrogen oxides) and particulate matter, as the majority of the State's population resides in areas that remain non-attainment for these pollutants.

Under the California Clean Air Act (CCAA), districts are to develop plans to attain the State ambient air quality standard for ozone by the earliest practicable date. The CCAA also requires these plans to demonstrate emission reductions of nonattainment pollutants or their precursors of at least five percent annually, averaged over three years, unless an ARB-approved alternative measure of progress is used. If a district cannot achieve these reductions, the CCAA provides that districts can develop approvable plans provided the plans commit to: 1) an alternative emission reduction strategy that is equal to or more effective than district-wide emission reductions in improving air quality; or 2) the implementation of *every feasible measure* on an expeditious schedule. This is a critical component of the CCAA. The Legislature wanted to ensure steady and expeditious progress towards meeting the more health-protective State standard but they also wanted to provide flexibility, knowing that in many cases the mature air pollution programs that were in place in California would be challenged by a rigid emission reduction target. Including the *every feasible measure* and expeditious adoption schedule requirements in the CCAA provided an alternative way of ensuring continuous progress in meeting the ambient air quality standards and underscored the expectation that meeting the ambient air quality standards would require the most effective measures possible, resulting in real emission reductions.

The districts prepared the initial CCAA plans in the early part of this decade. At that time, all the districts submitting a plan committed to adopting *every feasible measure*. To assist the districts in this effort, the ARB staff developed a list identifying feasible measures that districts could use in developing their clean air plans. This list identified source categories for which regulations were clearly available and effective and represented a starting point for each district's analysis. It was provided with the expectation that, as regulatory programs moved forward and technology advanced, the *every feasible measure* list would undoubtedly change for each district.

The districts are well on their way to implementing the plans. However, plans are dynamic and must be periodically updated to reflect changing circumstances. Under the CCAA, districts are to revisit the CCAA plans every three years, beginning in 1994. As part of this effort, the districts are to ensure that their plans continue to meet the *every feasible measure* requirement pursuant to the CCAA.

To assist the districts in updating their current and future plans, we undertook an effort to identify potential areas of additional emission reductions that the districts can consider when updating their plans to ensure continued compliance with the *every feasible measure* mandate. As a result, we have identified performance standards for 24 stationary sources that can be evaluated for incorporation into the plans and implemented to maximize emission reductions. These performance standards are emission limits or work practice standards that, for the most part, have already been through a public review process. In the large majority of cases, the districts are already implementing these measures.

In this resource document, we have summarized, in question and answer format, this effort to assist the

districts in updating their plans to ensure inclusion of *every feasible measure*. We have also included, as an Appendix, the summary tables which identify the performance standards for the first set of stationary sources under review. As described later in this document, we intend to keep this information current by having ARB and district staff conduct periodic reviews of the performance standards compiled in the summary tables. Additional stationary source categories will be added when warranted.

II. EVERY FEASIBLE MEASURE

1. What is the definition of *every feasible measure*?

The CCAA requires districts that are unable to achieve five percent annual emission reductions to demonstrate to the ARB's satisfaction that it has included every feasible measure in its plan and an expeditious adoption schedule. However, the CCAA did not define the term *every feasible measure*. When the initial CCAA plans were being prepared, we looked to related environmental statutes that offered useful definitions and precedent for defining this term. The most relevant definition found, and the one used, was in the guidelines issued to implement the California Environmental Quality Act (CEQA). In these guidelines, "feasible" is defined as:

"Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." (14 California Code of Regulations, section 15364)

Thus, we interpret the adoption of *every feasible measure* to mean that, at a minimum, a district consider regulations that have been successfully implemented elsewhere. They should also consider going beyond what has already been accomplished by evaluating new technologies and innovative approaches that may offer potential emission reductions. Further, districts should consider not only technological factors, but also social, environmental, economic (e.g., cost-effectiveness), and energy factors which prevail in the district, along with the resources realistically available to the district to adopt, implement, and enforce the measures.

2. Why doesn't the Air Resources Board publish an *every feasible measure* list?

We believe it is unlikely that a "list" of *every feasible measure* could be developed that provides detailed information on control strategies and would meet each districts' needs for fulfilling the CCAA *every feasible measure* requirement. In 1991, the ARB did publish a "list" that represented every feasible measure. However, this list did not identify specific regulatory requirements that should be included in each plan; it only identified the source categories for which the districts could consider incorporating a measure in the event they had that source category in their district. This is consistent with the ARB's philosophy that "feasible" must ultimately be defined by each district based on technological, social, environmental, economic, and energy factors that prevail in the district, along with the resources realistically available to the district to adopt, implement, and enforce the measures. This identification of performance standards can be used in the same fashion; for those districts that have a source category in their district that is evaluated in this document, they can review the performance standards, taking into account the above mentioned factors, to determine if improvements to their CCAA plan can be made.

3. How do the RACT/BARCT requirements of the California Clean Air Act interface with the *every feasible measure* requirement?

The CCAA requires districts which have been designated nonattainment for the State ambient air quality standards for ozone, carbon monoxide, sulfur dioxide, or nitrogen dioxide to prepare and submit plans for attaining and maintaining the standards. The CCAA also specifies various measures which, to the extent necessary, must be included in the district plans. These measures include the use of best available retrofit control technology (BARCT) and reasonably available control technology (RACT) on existing stationary sources.

The required use of BARCT for existing stationary sources is one of the specified (feasible) measures. The CCAA defines BARCT as an emission limitation that is based on the maximum degree of reduction achievable, taking into account environmental, energy, and economic impacts by each class or category of source. Unfortunately the CCAA does not define RACT. However, its required use is only to be considered for small sources in moderate areas.

In developing their plans, each district determines which measures are necessary to include, as well as the specific details of each included measure. As guidance to districts developing stationary source control measures, the ARB publishes formal RACT/BARCT determinations, developed in conjunction with the California Air Pollution Control Officers Association (CAPCOA). The number of source categories addressed by these formal determinations is limited, and some of them may be several years old and not be representative of current control capabilities. This identification of performance standards is intended to complement the existing RACT/BARCT process while providing further assistance to districts in developing or revising control measures for stationary sources within their jurisdiction.

4. Which districts have California Clean Air Act plans that include *every feasible measure*?

As shown in Table I, there are 21 districts that have plans describing how they will meet the California ambient air quality standards. No district has been able to demonstrate a five percent annual reduction in ozone precursors. Therefore, every district's plan is evaluated on the basis of demonstrating adoption of *every feasible measure*. [\(1\)](#)

Table I
California Districts with California Clean Air Act Plans

- San Diego County APCD
South Coast AQMD
Monterey Bay Unified APCD
San Joaquin Valley Unified AQMD
Sacramento Metropolitan AQMD
Yolo-Solano AQMD
Santa Barbara County APCD
Imperial County APCD
Colusa County APCD*
Glenn County APCD*
Tehama County APCD*

Bay Area AQMD
Mojave Desert AQMD
Kern County APCD
Ventura County APCD
Placer County APCD
El Dorado County APCD
San Luis Obispo County APCD
Butte County AQMD*
Feather River AQMD*
Shasta County AQMD*

* Butte County, Feather River, and Shasta AQMDs and Colusa, Glenn, and Tehama APCDs have one plan that covers all the Upper Sacramento Valley Districts.

III. IDENTIFICATION OF PERFORMANCE STANDARDS

1. Which stationary source categories were evaluated for performance standards?

There are over 80 stationary source categories that are potential candidates for the districts to consider when updating their plans. These can be categorized into three tiers. The 24 source categories in Tier I are the first to be addressed by ARB staff and are the subject of this resource document. These categories were selected for review based on their emissions and emission reduction potential. The Tier I stationary source categories are listed in Table II along with the proposed Tier II and III categories. Based on the feedback at public workshops and discussions with district staff, we do not plan on evaluating the Tier II or III categories at this time.

Table II
Tier I, II, and III Stationary Source Categories

Tier I Stationary Source Categories		
Adhesives & Sealants	Aerospace Coatings	Architectural Coatings and Industrial Maintenance
Auto Refinishing	Bakery Ovens	Fugitive Emissions from Chemical Plants
Fugitive Emissions from Oil & Gas Production	Fugitive Emissions from Petroleum Refineries	Gasoline Terminals and Bulk Plants
Graphic Arts	Industrial Boilers	Large Water Heaters & Small Boilers
Marine Coatings	Metal Parts and Products Coatings (Non-Architectural)	Pleasure Craft Coating Operations
Polyester Resin Operations	Polymeric Foam Product Manufacturing	Portland Cement Kilns

Refinery Boilers	Restaurants, Chain-Driven Charbroilers	Small Industrial Boilers
Solvent Cleaning & Degreasing	Surface Coatings of Plastic Parts & Products	Wood Products Coating Operations
Tier II Stationary Source Categories		
Air Stripping Operations	Can & Coil Coatings	Coatings & Ink Manufacturing
Control of Emissions from Steam Drive Oil Production Wells	Control of Emissions from Cyclic Oil Production Wells	Cutback Asphalt
Fiberboard Manufacturing	Glass Melting Furnaces	Incinerators
Magnet Wire Coating Operations	Marine Vessel Ballasting & Housekeeping	Marine Vessel Loading Operations
Organic Chemical Manufacturing	Paper, Fabric, & Film Coating Operations	Plastic, Rubber, & Glass Coatings
Polymer Resin Manufacturing	Residential Heaters	Residential Water Heaters
Screen Printing	Semi-conductor Manufacturing	Spray-Coating Operations
Stationary Gas Turbines	Surface Coating of Large Appliances & Metal Furniture	Usage of Solvents
Utility Boilers (Electrical)	Vegetable Oil Manufacturing	VOC Waste Disposal
Wood Flat Stock & Paneling Coatings Operations	Stationary IC Engines	

Tier III Stationary Source Categories		
Aircraft Fuel Transfer into Storage Tanks	Clean Fuels for Fleets	Covers for Sumps, Pits, & Wastewater Processing Equipment
Crude Oil Pipeline Heaters	Flexible & Rigid Disc Manufacturing	Floating Roof Storage Tanks
Fossil Fuel Steam Generator Facilities	General Exemptions	Kelp Processing Plants
Landfill Emissions	Leather Processing Operations	Livestock Feed Yards

Motor Vehicle Assembly Line Coating Operations	NOx from Heat Transfer Operations	Oil Field Steam Generators
Oleum Transfer Operations	Organic Liquid Loading	Paper Treating Operations
Petroleum Solvent Dry Cleaners	Petroleum Storage Tank Degassing	Pharmaceutical & Cosmetic Manufacturing Operations
POTW Emissions	Refinery Vacuum Producing Systems, Wastewater Separators, & Process Unit Turnarounds	Residential Wood Combustion
Rubber Tire Manufacturing Operations	Spillage & Leaking of VOC	Solid Fuel-Fired Boilers
Solvent Storage	Surface Preparation & Cleanup	Surfactant Manufacturing
Synthetic Solvent Dry Cleaning	Vapor Recovery at Gasoline Dispensing Facilities	Wineries

2. What process did we use to identify the performance standards?

We followed a three-step process when identifying performance standards for a given source category. First, we reviewed all readily available source specific rules and guidance documents pertaining to a given source category to select those that contained the most effective performance standards. The determination of "most effective" was limited to an analysis of which requirements might go the furthest in reducing emissions. It was also our desire to select only those performance standards that had been subject to a full public process. Hence, we limited our review to current prohibitory rules that are being implemented and guidance documents such as Suggested Control Measures, RACT/BARCT guidelines, and U.S. EPA Control Technique Guidelines.

Once the rules or guidance documents that contained the most effective performance standards were selected, we conducted a side by side comparison of the rules. These comparisons are shown in the tables included in the Appendix.⁽²⁾ The final step was to identify the most effective performance standard(s) for the source category under review (identified with an "x" in the summary tables). To select the most effective performance standard, staff reviewed the performance standards identified for each regulated component within a source category and identified the performance standard that would result in the highest level of control that had been achieved in practice. In most cases, it was possible to identify one performance standard that represented the most effective performance standard; however, there were circumstances where this was not possible. For example, in some cases, each rule or measure compared had the same performance standard for a particular regulated component. In that case, there was not "one" rule or measure that could be identified as having the most effective performance standard - each of the measures had the "best" and necessarily, each performance standard was marked with an "x." In the large majority of cases, the performance standards are already being implemented. However, there are a few standards that were identified that have future effective dates. For these standards, while the technology that could be used to meet the performance standard would have been identified during the rule development process, the standard will not be enforced until the future date has passed.

We need to emphasize that this process was not designed to select what the ARB staff believe is the most

appropriate rule for a source category or to provide the level of detail necessary to propose a new standard. Nor should one assume if a district rule is listed as a reference for a particular performance standard that it will achieve the most emission reductions. The overall effectiveness of a rule will depend on many components including the test methods, averaging times, applicability, exemptions, and technical definitions. Our goal was to identify performance standards that are currently achieved in practice, not to evaluate a rule in its entirety. We also did not address cost-effectiveness in our comparison - a very important factor to consider when determining the feasibility of a rule. When adopting a rule or guidance measure, air quality staff are required to consider and provide data on the cost-effectiveness of the measure. However, because there has not been a consistent approach used to estimate cost-effectiveness and, in many cases, the data are unique to each area, we believed that providing cost-effectiveness data would not be beneficial and would be subject to misinterpretation. The effort would also exceed our resources available to complete such an analysis.

IV. USE OF THE RESOURCE DOCUMENT

1. What is the benefit of having this resource document?

We believe this summary of performance standards offers many benefits as California air quality agencies continue to work together to realize our clean air goals. This resource document provides present day data which identify performance standards that are currently achievable and summarizes a significant volume of data into a manageable and concise document. Districts that decide to include identified performance standards into a plan or stationary source rule will have the knowledge that the performance standard has achieved emission reductions elsewhere, and that technology is available to meet that performance standard. This information will also benefit both ARB and district staff by reducing the amount of time spent on reviewing existing rule databases and guidance documents. It is worth reiterating, however, that this resource document is a tool, not a guideline or mandate. The ARB staff do not intend to mandate adoption of performance standards identified in this document that are determined to be not feasible by a given district.

2. How can the districts use the performance standards data?

We believe the district staff can use the information on performance standards to support efforts to continue progress toward meeting the federal and California ambient air quality standards. This information will be useful during the planning process, such as revising and updating air quality plans, preparing rulemaking calendars, and developing rules. As an example, we propose that the information provided on performance standards be used as a starting point for each district's review and update of their plan to verify that it still incorporates *every feasible measure* as required by the California Clean Air Act. It may also prove useful as a resource when districts revisit or amend stationary source rules by providing ideas on ways to strengthen rules to achieve additional emission reductions. District staff should not assume, however, that because a performance standard is listed in a table, it is appropriate for source categories in every district. These performance standards should be considered a starting point for discussions with affected sources as well as with the other districts that have already incorporated a performance standard in a prohibitory rule. Each district will need to evaluate the appropriateness of a particular standard, taking into consideration cost-effectiveness and other district-specific factors as well as the overall rule requirements prior to adopting a final rule.

3. How can the ARB staff use the performance standards data?

We can use the information on performance standards to review air quality plans and plan revisions, district rulemaking calendars, and rules submitted by the districts for ARB comment. This information helps us provide consistent rule and plan reviews and allows staff to more easily identify areas for improvement or further reductions in either the plans or prohibitory rules. Consistent with our past practices, we will work with each individual district on any suggestions for improvement that are based on the information in the resource document. In addition, we do not intend to require every district to adopt each performance standard identified; rather, we expect them to evaluate the appropriateness of the performance standards for implementation in their district. As mentioned above, this will entail looking at district-specific factors such as emissions, source characteristics, cost-effectiveness, and technology availability. In the event their evaluation demonstrates they can realize cost-effective emission reductions, we will support their efforts to adopt the performance standards deemed feasible.

In addition, with the adoption of the new federal ambient air quality standards in 1997, the U.S. EPA will designate new federal nonattainment areas beginning in 1999, and additional emission reductions are likely to be required in existing nonattainment areas. New federal attainment plans for ozone will be required by 2003, with implementation of the plans and attainment of the standards through 2010 and beyond. The districts and ARB will soon be immersed in preparing the federal plans to meet the new ozone standard and information contained in this resource document may be useful in that exercise.

V. PUBLIC OUTREACH AND PROCESS FOR UPDATING DATA

1. What public outreach efforts were conducted to share this data with stakeholders?

This information was presented in draft form to the ARB at its March 1998 public hearing. At that time, the Board supported this project. While the majority of the information presented in the summary tables has already been through the public review process prior to its implementation as part of the adoption process for the rules and guidance documents, we wanted to share it with the Board as well as conduct public workshops with stakeholders and obtain district comment prior to finalization of the draft. As such, we pursued numerous avenues to obtain comment that could then be reflected in the final version of the resource document. We worked closely with district staff, both through the CAPCOA Planning Managers and Board of Directors and also formed a district/ARB workgroup to discuss the information. This group met by conference call on three occasions between March and October 1998. We also conducted 3 public workshops. These were held in Diamond Bar, the San Joaquin Valley (Bakersfield, Modesto, and Fresno), and in Sacramento during the month of August 1998. Each workshop was attended by approximately 20-25 people representing local industry representatives, consulting firms, and districts. At the workshops, ARB staff provided a short presentation on the resource document and solicited comment from the attendees. This final version of the resource document reflects modifications made in response to comments made at the workshops and by district staff during the district/ARB workgroup conference calls.

2. How will this information be kept current?

During the outreach efforts, the stakeholders and district staff frequently suggested that the resource document be kept current and up-to-date. We agree that this is important. To keep the information current, we developed a process that can be implemented concurrent with the existing rule review process. Each time a district adopts or amends a prohibitory rule for a source category included in the resource document, they will notify us if modifications to the resource document are necessary. In cooperation with the district staff, the ARB staff will update the tables and any changes will be reflected in the version of the resource document located on the ARB web site (www.arb.ca.gov/ssps/ssps.htm). We have added a date to each table in the appendix which will reflect the date of the most recent update for that specific category. We also intend to conduct at least annual reviews of the data to determine if additional modifications are needed. Comments can be provided at any time on the web version, and a location on the site is provided for submitting comments to the ARB. The information is also available electronically via CD-ROM or diskette.

3. What steps will be taken to keep abreast of new technologies?

There is clearly the need to go beyond what has already been accomplished and continue the search for new technologies that will achieve additional emission reductions further out in the future. Most populated areas in the State still experience days where the State and federal ambient air quality standards for ozone are exceeded and the new federal ozone standard will provide new challenges for some areas. It is important for air quality agencies to research, encourage, and foster new technology that holds promise for additional emission reductions of air pollutants. In the draft version of this resource document we had included, for many source categories, tables describing emerging technologies that were not widely used or required in practice, but offered potential for additional emission reductions in the next 3-5 years. Sources for this information included Best Available Control Technology/Lowest Achievable Emission Rate Clearinghouses, symposia, technical literature, and manufacturers of control technology.

During our public outreach, the following concerns were raised about the emerging technology information: 1) the information was sometimes dated and not particularly comprehensive or accurate; 2) the information was available elsewhere (e.g., BACT Clearinghouse); and 3) the draft did not always include discussions of cost-effectiveness, the stage of development, or whether the technology was proven. While many stakeholders recommended deleting the section as presented in the draft document, they encouraged the ARB to develop an alternative approach to address emerging technologies. As such, in the final document, we have omitted the emerging technology section. As an alternative, we are considering ways that ARB staff could identify new technology information such as sponsoring regular technology conferences, conducting informal focused workshops on specific source categories, and developing a web site that provides links and telephone contacts to information about new technologies. We welcome input on these and any other ideas that we might consider in presenting new technology information.

1. Both Monterey County and San Luis Obispo County APCDs recently provided plan updates in 1998 that included an alternative strategy for demonstrating the level of emission reductions needed to achieve the State ozone standard based on an ozone design value. (Guidance on Estimating Emission Reductions needed to Attain State Standards and for Determining Area Classifications in response to the California Clean Air Act, October 1990)

2. Two tables are included in the Appendix for each source category reviewed. Table I contains the side-by-side comparison of the performance standards for each regulated component within a source category. Table II is a continuation of Table I that lists the applicability, the more notable exemptions, and additional comments about each rule or measure.

APPENDIX

Notes on Tables

For the purpose of keeping this summary concise, there are many instances where a district's rule with equivalent performance standards for a particular subcategory is not mentioned. If a rule is cited as most effective, the rule is considered at least as effective and not necessarily more effective than other district rules.

In the following tables, an "x" is placed in the small column to the left of the most effective performance standard. "Most effective" can be defined as the best control efficiency, or resulting in the greatest percentage of emission reductions from the particular source category (without taking into account other factors such as exemptions and applicability). In many cases, more than one "x" is indicated because performance standards in different district rules are equivalent. For instance, two districts may have the identical emission limit, measured in grams/liter, for a coating category. Occasionally, more than one "x" may be indicated in cases where performance standards may not be identical, but it is hard to reach any definitive conclusion as to which rule is most effective. Certain tables include an 'nq' in the column on the left, meaning 'not quantifiable.'

For each source category, there is a Table I and a Table II. Table I presents the emission limitation, control efficiency, or other similar measure. Table II lists exemptions, applicability, and comments. Also, where there are more than five references, the tables are broken into two parts (e.g., Table I (1 of 2); Table I (2 of 2)).

The links below provide access to individual source category types in WordPerfect 6.x (WP6.x) format or Adobe Acrobat (PDF). The hypertext link specifies the file size of each file format for each summary table. The links below provide access to individual source category types in WordPerfect 6.x (WP6) format or Adobe Acrobat (PDF). The hypertext link specifies the file size of each file format for each summary table. In addition to these individual files, we provide the entire set of files in either format as a single downloadable compressed document. To access **ALL** of these summaries in a single zip-compressed file, download either of the links: [WordPerfect7 - 5,614K](#) or [Adobe Acrobat - 1,110K](#).

TABLE OF CONTENTS

SOURCE CATEGORY	WP 6.x FORMAT	ADOBE ACROBAT FORMAT
Adhesives and Sealants	1,281K	40K
Aerospace Coatings	1,284K	276K
Architectural and Industrial Maintenance Coatings	1,269K	46K
Auto Refinishing	1,312K	52K
Bakery Ovens	1,295K	26K
Fugitive Emissions from Chemical Plants	1,309K	121K
Fugitive Emissions from Oil and Gas Production	1,309K	88K
Fugitive Emissions from Petroleum Refineries	1,309K	49K
Gasoline Terminals and Bulk Plants	1,006K	16K
Graphic Arts	1,309K	102K
Industrial Boilers	1,312K	14K
Large Water Heaters and Small Boilers	1,312K	13K
Marine Coatings	1,313K	34K
Metal Parts and Products (Non-Architectural)	1,322K	49K
Pleasure Craft Coating Operations	1,313K	13K
Polyester Resin Operations	1,304K	121K
Polymeric Foam Product Manufacturing	1,313K	60K

Portland Cement Kilns	1,313K	11K
Refinery Boilers	1,313K	10K
Restaurants, Chain Driven Charbroilers	1,313K	17K
Small Industrial Boilers	1,292K	10K
Solvent Cleaning and Degreasing	1,284K	11K
Surface Coating of Plastic Parts and Products	1,311K	40K
Wood Product Coatings	1,307K	225K

[Top of page](#)

[Permitting - Related Activities](#)

A department of the California Environmental Protection Agency

Adhesives and Sealants

Table I
Identification of Performance Standards
Source Category: Adhesives and Sealants

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination for Adhesives and Sealants 10/98		BARCT Determination for Adhesives and Sealants 10/98		VCAPCD Rule 74.20 Adhesives and Sealants 1/14/97*					
		Performance Standard									
Adhesives:	VOC										
ABS welding	VOC	x	400 g/l				400 g/l				
Ceramic tile installation	VOC	x	130 g/l				130 g/l				
Cellulosic plastic welding (ex ethyl cellulose)	VOC					x	100 g/l				
Styrene-Acrylonitrile welding						x	100 g/l				
Other plastic welding						x	500 g/l				
Computer diskette jacket manufacturing	VOC	x	850 g/l								
Contact-general	VOC	x	540 g/l		250 g/l (1/1/00)		200 g/l				

* The Ventura rule was chosen for comparison purposes. Districts may want to consult other district rules.

Table I
Identification of Performance Standards
Source Category: Adhesives and Sealants

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination for Adhesives and Sealants 10/98		BARCT Determination for Adhesives and Sealants 10/98		VCAPCD Rule 74.20 Adhesives and Sealants 1/14/97*					
		Performance Standard									
Contact-special substrates	VOC	x	540 g/l		400 g/l (1/1/00) 250 g/l (1/1/01)** ***technology forcing		200 g/l				
Cove base installation	VOC	x	150 g/l				150 g/l				
CPVC welding 490 g/l	VOC	x	490 g/l				490 g/l				
Indoor floor covering installation	VOC	x	150 g/l				150 g/l				
Perimeter bonded sheet vinyl flooring installation	VOC		660 g/l								
Sheet-applied rubber installation	VOC		850 g/l	x	250 g/l (2002)** ***technology forcing						
Waterproof resorcinol glue	VOC	x	170 g/l								
Metal to urethane/rubber molding or casting	VOC		850 g/l	x	250 g/l (1/1/00)** ***technology forcing						
Multipurpose	VOC	x	200 g/l				200 g/l				

* The Ventura rule was chosen for comparison purposes. Districts may want to consult other district rules.

Table I
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Source Category: Adhesives and Sealants

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination for Adhesives and Sealants 10/98		BARCT Determination for Adhesives and Sealants 10/98		VCAPCD Rule 74.20 Adhesives and Sealants 1/14/97*					
		Performance Standard									
construction											
Nonmembrane roof installation/repair	VOC	x	300 g/l			300 g/l					
Other plastic cement welding	VOC	x	510 g/l								
Outdoor floor covering installation	VOC	x	250 g/l			150 g/l					
PVC welding	VOC	x	510 g/l			510 g/l					
Single-ply roof membrane installation/repair	VOC	x	250 g/l			250 g/l					
Structural glazing	VOC	x	100 g/l			100 g/l					
Thin metal laminating	VOC	x	780 g/l								
Tire retread	VOC	x	100 g/l			100 g/l					
Sealants:											
Architectural	VOC	x	250 g/l			250 g/l					

* The Ventura rule was chosen for comparison purposes. Districts may want to consult other district rules.

Table I
Identification of Performance Standards
Source Category: Adhesives and Sealants

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
Marine deck	VOC	x	760 g/l								
Nonmembrane roof installation/repair	VOC	x	300 g/l				300 g/l g/l				
Roadway	VOC	x	250 g/l				250 g/l				
Single-ply roof membrane	VOC	x	450 g/l				450 g/l				
Other	VOC	x	420 g/l				420 g/l				
Adhesive Primers:											
Automotive glass	VOC	x	700 g/l				700 g/l				
Plastic cement welding	VOC	x	650 g/l				650 g/l				
Single-ply roof membrane	VOC	x	250 g/l				250 g/l				
Traffic marking tape	VOC	x	150 g/l				150 g/l				
Other	VOC	x	250 g/l				250 g/l				
Sealant Primers:											
Architectural Non-porous	VOC	x	250 g/l				250 g/l				

* The Ventura rule was chosen for comparison purposes. Districts may want to consult other district rules.

Table I
Identification of Performance Standards
Source Category: Adhesives and Sealants

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination for Adhesives and Sealants 10/98		BARCT Determination for Adhesives and Sealants 10/98		VCAPCD Rule 74.20 Adhesives and Sealants 1/14/97*					
		Performance Standard									
Architectural- Porous	VOC	x	775 g/l				775 g/l				
Marine deck	VOC	x	760 g/l				760 g/l				
Other	VOC	x	750 g/l				775 g/l				
Adhesives Application On to Substrate: Limits apply when application is not specified above											
Flexible vinyl	VOC	x	250 g/l				250 g/l				
Fiberglass	VOC	x	200 g/l				200 g/l				
Metal	VOC	x	30 g/l				30 g/l				
Porous material	VOC	x	120 g/l								
Rubber	VOC	x	250 g/l								
Plastic foam	VOC						120 g/l				
Porous Material (ex wood and plastic foam)	VOC						150 g/l				
Wood	VOC						30 g/l				

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Table I
Identification of Performance Standards
Source Category: Adhesives and Sealants

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination for Adhesives and Sealants 10/98		BARCT Determination for Adhesives and Sealants 10/98		VCAPCD Rule 74.20 Adhesives and Sealants 1/14/97*					
		Performance Standard									
Adhesive for bonding dissimilar substrates together	VOC	x	substrate category with highest VOC content				substrate category with highest VOC content ex. flexible vinyl				
Other substrates	VOC	x	250 g/l				250 g/l				
Other Categories:											
Aerosol Adhesives	VOC	x	75 wt% 25 wt% (1/1/02)								
Cleanup Solvent ex. spray equipment	VOC	x	<45 mm Hg @ 20 C								
Cleanup Solvent, spray equipment (spray gun)	VOC	x	Enclosed system or equiv. ,or 70 g/l				enclosed gun washer or low emission spray gun cleaner, <45 mm Hg @ 20 C				
Cleanup Solvent, spray equipment (filters, lines, pipes, pumps)	VOC	x	Enclosed system or equiv. ,or 70 g/l				Enclosed system or equiv. ,or 70 g/l				
Cleanup Solvent, spray equipment, dried adhesive	VOC	x	<=9.5 mm Hg at 20C and kept in closed container				<=9.5 mm Hg at 20C and kept in closed container				
Surface preparation	VOC	x	<70 g/l				<=70 g/l				

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Table I
Identification of Performance Standards
Source Category: Adhesives and Sealants

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination for Adhesives and Sealants 10/98		BARCT Determination for Adhesives and Sealants 10/98		VCAPCD Rule 74.20 Adhesives and Sealants 1/14/97*					
		Performance Standard									
solvent, ex. single-ply roofing											
Surface preparation solvent, single-ply roofing	VOC	x	<=45 mm of Hg @ 20C			<=45 mm of Hg @ 20 C					
Add-on control equipment	VOC	x	85% overall capture and destruction eff. by wt,			85% overall capture and destruction eff. by wt, avg over 24 hrs					
Storage of VOC containing materials	VOC	x	storage or disposal in closed non-absorbent containers			storage or disposal in closed non-absorbent, nonleaking containers					
Adhesive strippers	VOC					<=9.5 mm Hg @ 20 C					

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Table I
Identification of Performance Standards
Source Category: Adhesives and Sealants

Regulated Component	Pollutant	Rule/Measure/Date							
		RACT Determination for Adhesives and Sealants 10/98		BARCT Determination for Adhesives and Sealants 10/98		VCAPCD Rule 74.20 Adhesives and Sealants 1/14/97*			
		Performance Standard							
Primers, sealants or adhesives						cannot contain 1,1,1-trichloroethane or methylene chloride; adhesives containing methylene chloride used to solvent weld polycarbonate, polysulfone, acrylics including PMMA, phenylene-oxide based resins, and polyetherimide are exempt from this requirement			

* The Ventura rule was chosen for comparison purposes. Districts may want to consult other district rules.

Table II
Identification of Performance Standards
Source Category: Adhesives and Sealants

Rule/Measure	Rule/Measure				
	RACT/BARCT Determination for Adhesives and Sealants 10/98	VCAPCD Rule 74.20 Adhesives and Sealants 1/14/97*			
Exemptions	tire repair, assembly and manufacturing of undersea- based weapon systems, products undergoing testing or evaluation in R&D, solvent welding operations used in mfr of medical devices, plaque laminating operations where adhesives are used to bond a clear, polyester acetate laminate to wood with lamination equipment installed prior to 7/1/92, adhesives and sealants containing less than 20 g/l, adhesives containing cyanoacrylate, products subject to consumer product reg, small use exemption of 55 g/yr of non-complying products, small user exemption of 200 lb/yr	low use exemption also restricts usage to 10 g/yr of any one product			

* The Ventura rule was chosen for comparison purposes. Districts may want to consult other district rules.

Table II
Identification of Performance Standards
Source Category: Adhesives and Sealants

Rule/Measure	Rule/Measure				
	RACT/BARCT Determination for Adhesives and Sealants 10/98	VCAPCD Rule 74.20 Adhesives and Sealants 1/14/97*			
Applicability	Any person who supplies, sells, offers for sale, or uses adhesives, sealants, sealant primers or adhesive primers	Same as RACT/BARCT			
Comments	RACT/BARCT Determination is a recent assessment of adhesives/sealants technology. Limits are representative of various district standards.	Non-checked limits contained in the Ventura Rule that are more stringent than the RACT/BARCT are not technically applicable to all substrate applications within the category.			

* The Ventura rule was chosen for comparison purposes. Districts may want to consult other district rules.

Aerospace Coatings

Notes: Several districts have adopted aerospace coating rules that establish VOC content limitations for specific coatings. Determining which rule is the most stringent is difficult because:

- 1) some rules define specific limits for specific types of coatings that are not defined in other districts,
- 2) some rules define coating categories generically while others have many coating specialty subcategories, and
- 3) different rules exempt different VOC compounds.

Therefore, it is important to provide the districts flexibility when selecting the best “combination” of requirements and not always the “most stringent” requirement. Each rule should be looked at as a system of emission limits and performance requirements designed to meet the requirements of a specific district’s program.

Table I (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
		BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating Operations 12/29/95		SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96		SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97		VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96		U.S. EPA Aerospace Manufacturing and Rework Operations ^(b) CTG implementation 9/1/98 and 9/1/99 <i>NESHAP limits in italics implementation 9/15/98</i>	
		Performance Standard									
VOC	VOC ROC	X	Reg 1 does not exempt PCE		Rule 102 exempts PCE		Rule 2 exempts PCE	X	Rule 2 ROC does not exempt PCE	X	CTG exempts PCE <i>NESHAP does not exempt PCE, TCA, MeCl</i>
adhesives and coating application, general solvent limit	VOC			X	reduce organic material emissions from organic solvent or materials containing organic solvent by 85% Rule 442						
spray coating equipment, general	VOC HAP			X	must be operated in a controlled enclosure except: spraying catalyzed epoxy or polyurethane primers or coating that can not fit in an enclosure or completed vehicles Rule 481					X	<i>primers & topcoats, with inorganic HAP emissions: all sources apply coatings in a booth or hangar in which air flow is directed downward onto or across the part or assembly being coated. (9-1-98)</i>
ablative coating	VOC				650 fire resistant, civilian						600 (9-1-99)
ablative coating military	VOC			X	970 fire-resistant, military						

Table I (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date										
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		Performance Standard										
adhesive, commercial interior	VOC				805 250 (1/1/02) adhesive bonding primer						X	760 (9-1-99)
adhesive, cyanoacrylate	VOC				X 805 250 (1/1/02) adhesive bonding primer							1020 (9-1-99)
adhesive, elastomeric	VOC				X 805 1/1/98 250 (1/1/02) adhesive bonding primer		850					
adhesive, fuel tank	VOC			X	620	X	620					620 (9-1-99)
adhesive, promotor	VOC ROC				X 805 250 (1/1/02) adhesive bonding primer				850			
adhesive, rocket motor bonding	VOC											890 (9-1-99)
adhesive, rubber-based	VOC			X	805							850 (9-1-99)

Table I (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
					250 (1/1/02) adhesive bonding primer						
adhesive, non-structural	VOC ROC			X	250			X	250		360 (9-1-99)
adhesive, structural epoxy	VOC					X	50 epoxy				
adhesive, structural autoclavable	VOC ROC		exempt Reg. 8 Rule 4 see adhesive bonding primer	X	50	X	50	X	50		60 (9-1-99)
adhesive, structural non-autoclavable	VOC ROC				850	X	250		850 NO SOURCES 12/97		850 (9-1-99) cure <250°F
adhesive, all other	VOC				adhesives exempt from all or part of Rule 1124 are subject to Rule 442	X	250 all other				

Table I (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
adhesive bonding primer	VOC ROC		850 exempt high-temp-cure >325°F see Reg 8 Rule 4, section 8-4-301 exempts operations using heat if <2.5 tpy VOC	X	805 250 (1/1/02) <350°F		850		X	780 NO SOURCES 12/97	850 <250°F (9-1-99) 1030 >250°F (9-1-99)
adhesive bonding primer, elastomer or elastomeric	VOC			X	805 250 (1/1/02) adhesive bonding primer		850				
adhesive bonding primer, epoxy-phenolic (metal to honeycomb) >350°F	VOC										

Table I (1 of 2)
Identification of Performance Standards
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		Performance Standard									
adhesive bonding primer, long term metal to structural core bonding	VOC				800 250 (1/1/00) >350°F		850 structural				1030 (9-1-99)
adhesive bonding primer, short term metal to structural core bonding	VOC			X	250 >350°F		850 all other				1030 (9-1-99)
adhesive bonding primer, decorative laminating	VOC										
adhesive bonding primer, military	VOC										
adhesive bonding primer, nitrile phenolic (metal to metal)	VOC										
adhesive bonding primer, all other	VOC										
antichafe	VOC			X	600	X	600	X	600		660 (9-1-99)

Table I (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

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		Performance Standard									
barrier a.k.a. fastener lubricative, barrier coating	VOC ROC							X	420		
bearing	VOC			X	420 fastener, <u>lubricative</u> , barrier coating		620				
caulking and smoothing compounds	VOC					X	850				
chemical agent-resistant (CARC)	VOC			X	420 topcoat						550 (9-1-99)
commercial exterior aerodynamic structural primer	VOC			X	650 low solids corrosion resistant primer						650 (9-1-99)
conformal	VOC ROC				750		750		750		
corrosion prevention compound	VOC			X	780 pretreatment coating						780 (9-1-99)

Table I (1 of 2)
Identification of Performance Standards
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		Performance Standard									
cryogenic flexible primer	VOC			X	350 general primer						645 (9-1-99)
cryoprotective coating	VOC			X	420 topcoat						600 (9-1-99)
electric or radiation effect coating	VOC ROC		800		800		800		675 NO SOURCES 12/97		800 (9-1-99)
elevated temperature skydrol resistant commercial primer	VOC			X	805 250 (1/1/02) adhesive bonding primer					X	740 (9-1-99)
extreme performance interior coating, barrier	VOC	X	420	X	420 topcoat						
fastener, <u>installation</u> , solid-film lubricant	VOC ROC			X	880			X	880		
fastener, <u>installation</u> , dry lubricative material	VOC			X	675						

Table I (1 of 2)
Identification of Performance Standards
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		Performance Standard									
fastener, <u>lubricative</u> , solid-film lubricant	VOC ROC			X	250			X	250 mfg 1 SOURCE USING AFTERBURNER 12/97		
fastener, <u>lubricative</u> , dry lubricative material	VOC ROC			X	120		250 9/1/92		250 mfg		
fastener, <u>lubricative</u> , barrier coating	VOC ROC			X	420			X	420 barrier		
<u>non-fastener lubricative</u> , solid film lubricant	VOC ROC			X	880			X	880		
<u>non-fastener lubricative</u> , dry lubricative material	VOC ROC			X	675		880		880		
fastener, wet installation coating	VOC			X	250 fastener, <u>lubricative</u> , solid-film lubricant						850 (9-1-99)
fire insulation coating, interior fire-resistant, civilian	VOC ROC	X	600		650				650		800 (9-1-99)

Table I (1 of 2)
Identification of Performance Standards
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		Performance Standard									
fire-resistant, military	VOC			X	970						
flight-test coating, missiles or single use target	VOC ROC			X	420			X	420		420 (9-1-99)
flight-test coating, all other	VOC ROC				840			X	600 NO SOURCES 12/97		840 (9-1-99)
fuel tank coating	VOC ROC		720	X	420		720	X	420		720 (9-1-99)
fuel tank coating, epoxy	VOC ROC			X	680 420 (1/1/99)			X	620 NO SOURCES 12/97		780 (9-1-99) compatible substrate, epoxy or adhesive primer surfaces that contain fuel (not fuel tank coating)
fuel tank coating, rubber	VOC				680 420 (1/1/02)						
high-temperature coating, >350°F	VOC ROC		720		850		850		850 NO SOURCES 12/97		850 (9-1-99)

Table I (1 of 2)
Identification of Performance Standards
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		Performance Standard									
impact resistant	VOC ROC			X	420			X	420		780 (9-1-99) compatible substrate, epoxy
insulation covering, applied to foam insulation	VOC			X	420 topcoat						740 (9-1-99)
lacquer	VOC										830 (9-1-99) Note: California pigmented lacquer may be considered topcoats (320 g/L) while non-pigmented lacquer may be considered clear topcoats (520 g/L)
metallized epoxy coating	VOC			X	700						740 (9-1-99)
mold release	VOC										780 (9-1-99)
optical anti-reflective	VOC ROC			X	700			X	700		750 (9-1-99)
part marking	VOC										850 (9-1-99)

Table I (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

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		Performance Standard									
pretreatment wash primer, 0.5% acid	VOC ROC	X	420		780 pretreatment coating		780		780		780 (9-1-99)
primer, general	VOC ROC HAP	X	350	X	350	X	350	X	350 phosphate		350 (2.9 lb/gal) (9-1-98)
primer, flexible	VOC			X	350 primer general						640 (9-1-99)
primer, low solids corrosion resistant	VOC			X	650 see commercial exterior aerodynamic structural primer					X	650 (9-1-99)
primer, not resistant to phosphate esters	VOC ROC			X	350 primer general			X	350		
primer, resistant to phosphate esters	VOC ROC			X	350 primer general			X	350		
primer, compatible w/ rain resistant coating	VOC			X	850						

Table I (1 of 2)
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Source Category: Aerospace Coatings ^(a)

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		Performance Standard									
rain erosion-resistant	VOC ROC				800			X	420 NO SOURCES 12/97		850 (9-1-99)
rain erosion resistant, fluoroelastomer	VOC										
rocket motor nozzle	VOC									X	660 (9-1-99)
sealant	VOC ROC	X	600	X	600	X	600	X	600		600 (9-1-99) sealant, spray
sealant, extrudable/rollable/brush- able	VOC			X	600 sealant					X	280 (9-1-99)
self-priming topcoat, unicoat	VOC ROC HAP	X	420	X	420	X	420	X	420		420 (3.5 lb/gal) (9-1-98)
sealant bonding primer, used before silicone sealant	VOC		720	X	350 primer general						
silicone insulation material	VOC									X	850 (9-1-99)
scale inhibitor	VOC ROC			X	880			X	880		880 (9-1-99)

Table I (1 of 2)
Identification of Performance Standards
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		Performance Standard										
screen print ink	VOC											840 (9-1-99) Note: California Graphic Art or Screen Printing Rules contain limits (300- 800 g/L)
space-vehicle, adhesive	VOC ROC			X	800	X	800	X	800			
space-vehicle coating, electrostatic discharge protective coating	VOC ROC			X	800	X	800	X	800			800 (9-1-99)
space-vehicle coating, thermocontrol	VOC ROC											
space-vehicle coating, other	VOC ROC			X	1000	X	1000	X	1000			
temporary protective coating	VOC ROC	X	250			X	250	X	250			320 (9-1-99)
thermal control	VOC					X	600					800 (9-1-99)
thermal expansion release	VOC											
topcoat, general	VOC ROC	X	320		420		420		420			<i>420 (3.5 lb/gal)</i>

Table I (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

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		Performance Standard									
	HAP										(9-1-98)
topcoat, clear	VOC ROC			X	520			X	520		720 (9-1-99) clear coating
topcoat, epoxy polyamide	VOC ROC									X	660 (9-1-99)
topcoat, interior	VOC ROC	X	340		420 topcoat, general		420 topcoat, general		420 topcoat, general		
topcoat, acrylic lacquer for F-111	VOC										
wing	VOC ROC			X	750			X	420 NO SOURCES 12/97		850 (9-1-99)
wire, electronic	VOC ROC			X	420			X	420		
wire, anti-wicking	VOC ROC			X	420			X	420		

Table I (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
		BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating Operations 12/29/95		SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96		SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97		VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96		U.S. EPA Aerospace Manufacturing and Rework Operations ^(b) CTG implementation 9/1/98 and 9/1/99 <i>NESHAP limits in italics implementation 9/15/98</i>	
		Performance Standard									
wire, pre-bonding etchant	VOC ROC			X	420			X	420		
phosphate ester resistant ink	VOC ROC			X	925			X	925		
all other or general coating	VOC			X	350		420				

Table I (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

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		Performance Standard								
primer & topcoats, inorganic HAP emissions	HAP									<i>all sources: apply coatings in a booth or hangar in which air flow is directed downward onto or across the part or assembly being coated. (9- 1-98)</i> <i>existing (constructed before 6-6-94): - control, 2 stage dry particulate filter (9-1-98)</i> <i>for new source constructed between 6/6/94 and 10/29/96: - control, 2 stage dry particulate filter or -waterwash</i> <i>new source constructed between 6/6/94 and 10/29/96 with chromium or cadmium:</i>

Table I (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

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		Performance Standard									
											<i>-control , 3 stage dry particulate filter or -HEPA filter</i> <i>new source constructed after 10/29/96: -control, 3 stage dry particulate filter</i>
maskant, chemical processing	VOC	X	600 does not exempt PCE	X	250 exempts PCE	X	250 exempts PCE <u>or</u> dip tank controls				
maskant, chemical milling	VOC ROC HAP	X	600 does not exempt PCE (included above in chemical processing)		250 exempts PCE	X	160 type II others 250 <u>or</u> type I dip tank controls exempts PCE	X	250 does not exempt PCE	X	622 type I (9-1-98) 160 type II (9-1-98) <i>does not exempt PCE</i>

Table I (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
maskant, photolithographic	VOC			X	850						
maskant, touch-up, liner-sealer	VOC			X	750						
maskant, bonding	VOC			X	250 maskant processing exempts PCE						1230 (9-1-99)
maskant, critical use an line sealer	VOC			X	250 maskant processing exempts PCE						1020 (9-1-99)
maskant, seal coat	VOC			X	250 maskant processing exempts PCE						1230 (9-1-99)

Table I (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

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		Performance Standard									
solvent use, surface preparation, clean up or mixing	VOC ROC HAP				- ≤ 200 g/l <u>or</u> - composite partial pressure ≤ 45 mm Hg or less at 20°C	X	- ≤ 200 g/l <u>or</u> - ≤ 45 mm Hg or less at 20°C <u>or</u> - initial boiling point ≤ 190°C <u>or</u> greater at 760 mm Hg total pressure - enclosed cleaning material which is opened only when accessing part or adding surface cleaning material	X	- ≤ 200 g/l <u>or</u> - ROC ≤ 25 mm Hg at 20°C	X	- <i>aqueous cleaning solvent with ≥ 80 % water, a flashpoint > 93°C (200°F), and miscible with water, <u>or</u> - hydrocarbon cleaner with a max. VP ≤ 7 mm Hg at 20°C (3.75 in H₂O at 68°F) and contain no HAP or ozone depleting compounds, <u>or</u> - composite partial pressure ≤ 45 mm Hg or less at 20°C (9-1-98)</i>

Table I (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
solvent use, storage or disposal of coating or stripper containing organic solvent	VOC ROC HAP		minimize solvent evaporative loss: - closed containers for storage or disposal of cloth or paper - closed container when not in use 8/4/82		- solvent non-adsorbent, no-leaking container kept closed - recommended cloth and paper be stored the same Rule 1171		- can't use coating equipment to dispose of . . . into the air		- closed containers		- <i>place solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers designed as to contain vapors upon completing their use.</i> <i>- keep closed when not in use (9-1-98)</i>

Table I (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

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		Performance Standard									
solvent use, cleaning equipment	VOC ROC HAP	X	shall not use organic compounds for the cleanup of spray equipment including paint lines unless equipment for collecting the cleaning compounds <u>and</u> minimizing their evaporation to the atm is used. 2/3/93		- closed during cleaning operations; - remote reservoir; - non-atomized solvent flow w/ collection system closed; - flushing into closed container Rule 1171	X	- ≤ 200 g/l <u>or</u> - ≤ 20 mm Hg or less at 20°C <u>or</u> - initial boiling point ≤ 190°C <u>or</u> greater at 760 mm Hg total pressure - closed during cleaning - cleaned equipment or part is drained until dripping ceases - totally encloses component part during washing, rinsing and draining		-enclosed gun washer or low emission spray gun cleaner approved by APCO <u>and</u> -ROC composite partial pressure of organic solvent used is less than 45 mm Hg at 20°C		- <i>enclosed system;</i> - <i>non-atomized cleaning;</i> - <i>disassemble and clean in a vat;</i> - <i>atomized into a container designed to capture emissions (9-1-98)</i>

Table I (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

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		Performance Standard									
stripper, organic emissions	VOC ROC HAP		- ≤ 400 g/l <u>or</u> - ≤ 10 mm Hg (0.19 psia) true VP at actual usage temperature		- ≤ 300 g/l <u>or</u> - ≤ 9.5 mm Hg (0.18 psia) composite partial pressure at 20°C		- ≤ 400 g/l <u>or</u> - ≤ 9.5 mm Hg (0.18 psia) composite partial pressure less at 20°C		- ≤ 300 g/l ROC <u>or</u> - ROC composite partial pressure ≤ 9.5 mm Hg or less at 20°C		<i>Option 1 -non-HAP chemical strippers no control (9-1-98)</i> <i>Option 2 - nonchemical based equipment: operate & maintain the equipment according to the mfg. specification. (9-1-98)</i> <i>Option 3 - organic HAP chemical stripper with add-on control: - existing sources constructed before 9-1-95 reduce the organic HAP emissions ≥81% (9- 1-98) - new sources constructed on or after 9- 1-95 reduce the organic HAP ≥ 95%</i>
stripper,	HAP										X <i>inorganic emission using</i>

Table I (1 of 2)
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		Performance Standard						
inorganic HAP emissions								<i>nonchemical based equipment: - all sources perform stripping in an enclosed area or use a closed-cycle stripping system (9-1-98) - existing sources constructed before 9-1-95 2-stage dry particulate filter; bag house; or waterwash system (9-1-98) - new sources constructed on or before 9-1-95 3- state particulate filter or bag house</i>

Table I (1 of 2)
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		Performance Standard									
spray application equipment transfer equipment	VOC ROC HAP	X	- HVLP electrostatic spray, or detailing gun - alternative = see exemptions	X	- electrostatic, flow, roll, dip, HVLP, hand - alternative =		- electrostatic, flow, dip, hand, HVLP or equivalent - airless for maskants and temporary protective coating,	X	- electrostatic at min 60 kV, flow coat, dip coat, hand application methods, HVLP, <u>or</u> - alternative 65 %		- <i>flow, dip, roll, brush, cotton-tipped swab, electrodeposition dip, HVLP, electrostatic spray (9-1-98) - alternative = electrostatic or HVLP 30 day demonstration</i>
control equipment, capture efficiency	VOC ROC HAP		control to an <u>equivalent level</u> by air pollution abatement device of at least 85 %	X	collection ≥ 90 %, by weight <u>or</u> output of the air pollution control device is < 50 PPM calculated as carbon with no dilution		combined capture and control 85 % by weight <u>and</u> approval by APCO		combined capture and control 85 % by weight <u>and</u> approval by APCO		add-on control system that reduces <i>HAP</i> and VOC emissions 81% overall efficiency (9-1-98)
control equipment, control efficiency	VOC ROC HAP		control to an <u>equivalent level</u> by air pollution abatement device of at least 85 %	X	control device efficiency at least 95 % by weight (combined 85.5 %)		combined capture and control 85 % by weight <u>and</u> approval by APCO				add-on control system that reduces <i>HAP</i> and VOC emissions 81% overall efficiency (9-1-98)

Table I (1 of 2)
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		Performance Standard									
averaging or an alternative emission control plan (AECF)	VOC ROC HAP		Rule 100 AECF		Rule 108 AECF - daily RK - 24-hour average - 20 % reduction from baseline NO SOURCES		Rule 67.1 AECF - daily RK - daily compliance - 20 % reduction form baseline		no		- daily RK w/ monthly volume- weighted average of HAP and VOC - uncontrolled primer - uncontrolled topcoat - uncontrolled maskant (9-1-98)
labeling or seller information requirements	VOC ROC		label or data sheet						label or data sheet		

Table I (1 of 2)
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Source Category: Aerospace Coatings ^(a)

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		Performance Standard				
recordkeeping, data	VOC ROC HAP	mfg. compliance statement via container or data sheet: - VOC g/L or #/gal - max. thinning ratio to maintain compliance w/ VOC limit - coating stripper, catalyst & reducer used - VOC content of coating & stripper	MSDS, mfg. data sheet, calculate, or test to determine VOC composition Exempts: solvent with water content 98% by weight <u>or</u> VOC composite pressure \leq 0.1 mm Hg at 20° C <u>or</u> VOC with > 12 carbon atoms Rule 109	see below	label or data sheet ROC - content - ROC composite partial pressure of cleaning material - recommended mixing with other ROC - ROC cleaning material ROC content	manufacturer data or test to determine HAP and VOC content

Table I (1 of 2)
Identification of Performance Standards
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		Performance Standard					
recordkeeping, usage coating	VOC ROC HAP	weekly: - coating & mix ratio as applied - quantity of each coating applied	daily records: - applicable district Rule 109 - list of permit units involved using adhesives, coatings, solvents - method of application & substrate type - amount & type in each permit unit or dispensing station - VOC content - amount (including exempt compounds) used and VOC content of each -oven temperature	coating list: - uses - allowable VOC content - type and/or category - mfg. ID - mix ratio - VOC content per volume - multi-stage maskants mfg. ID of the component monthly: - materials not applied by dip coating, amount of each coating, stripper, & thinner used - material added to coating dip tanks	mfg. specification sheet such as MSDS - type - ROC g/L - mix ratio - daily volume - method of application	- name & content mass or organic HAP or VOC per volume - data, calculation, test results monthly: - volume (gal) of each coating formulation (9-1-98)	

Table I (1 of 2)
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		Performance Standard									
recordkeeping, usage solvent	VOC ROC HAP		monthly: - type - amount		daily records: - applicable district Rule 109 - list of permit units involved using adhesives, coatings, solvents - method of application & substrate type - amount & type in each permit unit or dispensing station - VOC content - amount (including exempt compounds) used and VOC content of each - vapor pressure of solvents used as surface cleaners		coating list: - uses - allowable VOC content - type and/or category - mfg. ID - mix ratio - VOC content per volume of material, vapor pressure, or initial boiling point monthly: - inventory of solvents used for equipment cleaning and surface cleaning		mfg. specifications sheet - type - ROC g/L - daily volume of solvent & stripper - ROC composite partial pressure		- name of solvent - composition, data & calculation - annual volume based upon purchase records - composite vapor pressure (9-1-98)

Table I (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

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		Performance Standard									
recordkeeping, usage stripper	VOC ROC HAP		monthly: - amount - amount added to tank- type stripper		same as solvent above		same as solvent above		same as solvent above		<i>chemical:</i> - name - monthly volume of each organic HAP stripper (9- 1-98) <i>nonchemical:</i> - name - type of nonchemical based equipment (9-1-98)
recordkeeping, alternative allowed	VOC ROC HAP		yes		yes Rule 108 AECP		yes Rule 67.1 AECP		no		yes, only uncontrolled primer or topcoats or maskants

Table I (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

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		Performance Standard					
recordkeeping, control equipment	VOC ROC HAP	daily: - coating usage - key system operating parameters	permit conditions	- same as coating, solvent & strippers above and O & M plan: - ID all key system operating parameters e.g., temperature, pressure, flow rate. - inspection schedules, anticipated ongoing maintenance, & proposed RK	daily records - key system operating and maintenance procedures which will demonstrate continuous operation & compliance - key system operating parameters	RK for carbon adsorber or other control	

Table I (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

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		Performance Standard									
retention of records	VOC ROC HAP		5 years for Title V source; 2 years H&SC 42705		5 years for Title V source; 2 years H&SC 42705 Rule 109 2 years		5 years for Title V source; 2 years H&SC 42705 3 years Rule 67.9		5 years for Title V source; 2 years H&SC 42705 2 years Rule 74.13		5 years for Title V source
methylene chloride reduction plan	exempt VOC		by 1/1/95								
qualification acceptance testing progress report	VOC				6 month progress report on coatings with future compliance dates - amount used - cost						
compliance statement required	VOC ROC HAP								yes		yes

^(a) performance standard is grams of volatile organic compounds (VOC) per liter, less exempt compounds, less water, applied unless otherwise indicated

^(b) CTG final dated December 1997; released 3/27/98 63FR15006, effective date 9-1-98 for solvent cleaning; effective dated 9-1-99 for speciality coatings, application equipment & add-on control
NESHAP/CTG final 9/15/95 60FR45948, amended 2/9/96 61FR04903, 12/17/96 61FR66227, 3/27/98 63FR15006,
effective date 9/15/95; compliance for existing sources 9/1/98; compliance for new sources 6-6-94 or startup, (contains HAP & VOC emission limits)

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
		More stringent limits only M AQMD Rule 1118 10/28/96		More stringent limits only ICAPCD Rule 425 3/3/92 <i>currently under revision</i>		More stringent limits only SBCAPCD Rule 337 10/20/94		More stringent limits only SJUAPCD Rule 423 12/19/96		More stringent limits only SMAQMD Rule 456 9/5/96 5/98 <i>draft revision</i>	
		Performance Standard									
VOC	VOC ROC		exempts PCE	X	ROC does not exempt PCE	X	Rule 102 does not exempt PCE	X	Rule 2 does not exempt PCE		Rule 101 exempts PCE
adhesives and coating application, general solvent limit	VOC	X	reduce organic solvent or materials containing organic solvent by 85% Rule 442								
spray coating equipment, general	VOC HAP										
ablative coating	VOC			X	600					X	600
ablative coating military	VOC										
adhesive, commercial interior	VOC										
adhesive, cyanoacrylate	VOC										
adhesive, elastomeric	VOC				850						
adhesive, fuel tank	VOC							X	620		
adhesive, promotor	VOC ROC								850		890
adhesive, rocket motor bonding	VOC										

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
adhesive, rubber-based	VOC										
adhesive, non-structural	VOC ROC	X	250					X	250		
adhesive, structural epoxy	VOC			X	50 UNDEFINED SEE SD; UNDER REVISION						
adhesive, structural autoclavable	VOC ROC	X	50	X	50			X	50		
adhesive, structural non-autoclavable	VOC ROC		700	X	250				850		
adhesive, all other	VOC										
adhesive bonding primer	VOC ROC	X	250 NO SOURCES	X	250 CURRENTLY UNDER REVISION	X	250 NO SOURCES	X	250		
adhesive bonding primer, elastomeric	VOC										
adhesive bonding primer, epoxy-phenolic (metal to honeycomb) >350°F	VOC							X	800 250 (5/1/02)		

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
adhesive bonding primer, long term metal to structural core bonding	VOC							X	250		
adhesive bonding primer, short term metal to structural core bonding	VOC								800 250 (5/1/02)		
adhesive bonding primer, decorative laminating	VOC							X	800		
adhesive bonding primer, military	VOC							X	700 250 (5/1/02)		
adhesive bonding primer, nitrile phenolic (metal to metal)	VOC							X	800 250 (5/1/02)		
adhesive bonding primer, all others	VOC			X	350 CURRENTLY UNDER REVISION						
antichafe	VOC							X	600		

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
barrier a.k.a. fastener lubricative, barrier coating	VOC ROC										
bearing	VOC										
caulking and smoothing compounds	VOC										
chemical agent-resistant (CARC)	VOC		500								
commercial exterior aerodynamic structural primer	VOC							X	650		
conformal	VOC ROC								750	X	600 available & in-use
corrosion prevention compound	VOC										
cryogenic flexible primer	VOC										
cryoprotective coating	VOC										
electric or radiation effect coating	VOC ROC		800				800		800	X	600 CHECKING IF AVAILABLE & IN USE

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
		More stringent limits only M AQMD Rule 1118 10/28/96		More stringent limits only ICAPCD Rule 425 3/3/92 <i>currently under revision</i>		More stringent limits only SBCAPCD Rule 337 10/20/94		More stringent limits only SJUAPCD Rule 423 12/19/96		More stringent limits only SMAQMD Rule 456 9/5/96 5/98 <i>draft revision</i>	
		Performance Standard									
elevated temperature skydrol resistant commercial primer	VOC										
extreme performance interior coating, barrier	VOC	X	420								
fastener, <u>installation</u> , solid-film lubricant	VOC ROC							X	880		
fastener, <u>installation</u> , dry lubricative material	VOC							X	675		
fastener, <u>lubricative</u> , solid-film lubricant	VOC ROC			X	250 CURRENTLY UNDER REVISION				800		
fastener, <u>lubricative</u> , dry lubricative material	VOC ROC							X	120		
fastener, <u>lubricative</u> , barrier coating	VOC ROC							X	420		
<u>non-fastener lubricative</u> , solid film lubricant	VOC ROC			X	880			X	880	X	880
<u>non-fastener lubricative</u> , dry lubricative material	VOC ROC							X	675		

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
fastener, wet installation coating	VOC										600 wet seal primer
fire insulation coating, interior fire-resistant, civilian	VOC ROC		650			X	600		650		
fire-resistant, military	VOC	X	970								
flight-test coating, missiles or single use target	VOC ROC			X	420			X	420		
flight-test coating, all other	VOC ROC							X	600		
fuel tank coating	VOC ROC		720	X	420			X	420		
fuel tank coating, epoxy	VOC ROC							X	420		

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
fuel tank coating, rubber	VOC										
high-temperature coating, >350°F	VOC ROC		720				720			X	420 available & in-use
impact resistant	VOC ROC							X	420		
insulation covering, applied to foam insulation	VOC										
lacquer	VOC										
metallized epoxy coating	VOC										
mold release	VOC									X	762 available & in-use proposed 1-22-98
optical anti-reflective	VOC ROC							X	700		
part marking	VOC									X	850 (12-31-98)
pretreatment wash primer, 0.5% acid	VOC ROC		780			X	400 NO SOURCES		780		

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
primer	VOC ROC HAP	X	350			X	350	X	350		
primer, flexible	VOC										
primer, low solids corrosion resistant	VOC							X	650 commercial exterior aerodynamic structural primer		
primer, not resistant to phosphate esters	VOC ROC										
primer, resistant to phosphate esters	VOC ROC										
primer, compatible w/ rain resistant coating	VOC										
rain erosion-resistant	VOC ROC	X	600			X	600		800	X	600
rain erosion resistant, fluoroelastomer	VOC									X	800
rocket motor nozzle	VOC										

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
sealant	VOC ROC	X	600			X	600	X	600	X	600
sealant, extrudable/rollable/brushable	VOC										
self-priming topcoat, unicoat	VOC ROC HAP	X	420			X	420	X	420	X	420
sealant bonding primer, used before silicone sealant	VOC		720								
silicone insulation material	VOC										
scale inhibitor	VOC ROC							X	850 TYPO, WILL BE REVISED TO 880		
screen print ink	VOC										
space-vehicle, adhesive	VOC ROC							X	800		

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
space-vehicle coating, electrostatic discharge protective coating & other	VOC ROC	X	800	X	800	X	800	X	800		
space-vehicle coating, thermocontrol	VOC ROC			X	600 CURRENTLY UNDER REVISION						
space-vehicle coating, other	VOC ROC	X	1000			X	1000	X	1000	X	1000
temporary protective coating	VOC ROC	X	250	X	250	X	250	X	250	X	250
thermal control	VOC									X	600
thermal expansion release	VOC									X	762
topcoat, general	VOC ROC HAP		420								
topcoat, clear	VOC ROC							X	520		
topcoat, epoxy polyamide	VOC ROC										
topcoat, interior	VOC ROC	X	340			X	340				

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
topcoat, acrylic lacquer for F-111	VOC									X	780
wing	VOC ROC	X	750					X	750		
wire, electronic	VOC ROC							X	420		
wire, anti-wicking	VOC ROC							X	420		
wire, pre-bonding etchant	VOC ROC							X	420		
phosphate ester resistant ink	VOC ROC							X	925		
all other or general	VOC	X	350								
primer & topcoats, inorganic HAP emissions	HAP										
maskant, chemical processing	VOC		600 exempts PCE			X	600 does not exempt PCE				

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

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		Performance Standard									
maskant, chemical milling	VOC ROC HAP		622 type I 160 type II exempts PCE	X	250 does not exempt PCE CURRENTLY UNDER REVISION			X	250 does not exempt PCE		622 <i>type I (12-31-98)</i> 160 <i>type II (12-31-98)</i> exempts PCE
maskant, photolithographic	VOC										
maskant, touch-up, liner-sealer	VOC										
maskant, bonding	VOC										
maskant, critical use an line sealer	VOC										
maskant, seal coat	VOC										
solvent use, surface preparation, clean up or mixing	VOC ROC HAP		≤ 45 mm Hg at 20°C or ≤ 200 g/L		≤ 200 g/L ROC or 45 mm Hg at 20°C composite VP				≤ 200 g/L or 45 mm Hg (0.87 psia) at 68°F (20°C)		proposed 2/98 ≤ 200 g/L or ≤ 45 mm Hg at 20°C

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
solvent use, storage/disposal of coating or stripper containing organic solvent	VOC ROC HAP		keep closed except during extraction or introduction of material for mixing, use or storage		- proposed 10/97 closed containers - transported to a permitted waste disposal facility in sealed metal or plastic molded drums with snap-on or screw-type lids		closed container		closed containers		-closed containers for disposal -containers closed when not in use -disposed in a manner that the VOC are not emitted into the atm
solvent use, cleaning spray equipment	VOC ROC HAP				- enclosed or sealed apparatus with 85 % of the ROC collected and properly disposed of such that they are not emitted to the atm - spray gun cleaning; enclosed gun cleaner				- enclosed system or enclosed gun washer		-except for electrostatic spray guns, shall not use VOC-containing materials for the cleaning of spray guns unless the spray gun is cleaned in an enclosed gun cleaner -proposed 2/98 spray gun nozzles may be soaked solvent-based materials for cleaning provided the container, ≤ 5 gallons, is keep closed except when accessing the container

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
stripper, organic	VOC ROC HAP		< 400 g/L	X	≤ 200 g/L ROC		≤ 400 g/L ROC or 10 mm Hg at actual use temperature	X	≤ 300 g/L or ≤ 9.5 mm Hg (0.18 psia) at 68°F (20°C)		
stripper, inorganic HAP emissions	HAP										
spray application equipment transfer equipment	VOC ROC HAP	X	- electrostatic, flow, dip, HVLV, electrodeposition, hand, detailing or touch-up gun - alternative =		- electrostatic, flow, dip, hand, HVLV - airless for maskants and temporary protective coating - alternative ≥ 65 %	X	- electrostatic, flow, dip, HVLV, electrodeposition, hand, detailing or touch-up guns - alternative 65 %	X	electrostatic, electrodeposition, HVLV, flow, roll, dip, brush	X	- hand, dip, flow, roll, electrodeposition, electrostatic, HVLV, LVLP - alternative =
control equipment, capture efficiency	VOC ROC HAP		≥ 85 % combined capture & control	X	proposed 10/97 ≥ 90 %	X	≥ 90 %	X	≥ 90 %	X	≥ 90 % proposed 2/98 85% overall system
control equipment, control efficiency	VOC ROC HAP		≥ 85 % combined capture & control	X	proposed 10/97 ≥ 95 %	X	≥ 95 %	X	≥ 95 %	X	≥ 95 % -proposed 2/98 85% overall system

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date					
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		Performance Standard					
averaging or an alternative emission control plan (AECp)	VOC ROC HAP	- daily RK - monthly volume weighted average - within coating class - uncontrolled only - facility-wide or process line	no	no	no	no	Rule 107 AECp
labeling or seller information requirements	VOC ROC	- date contents were mfg. or code - explanation if code is used - VOC content as applied - recommended thinning that does not exceed the VOC limits	proposed 10/97 - max ROC content after mixing or thinning as recommended - ROC g/L	- date or code content mfg - mfg recommendation thinning - max ROC g/L or lb/gal or VOC content			<i>deleted labeling req. added seller information req.:</i> - material type by name/code/mfg - mixing or thinning recommendation - max VOC content g/L coating - max VOC as applied strippers, solvents: - VOC content g/L - composite vapor pressure

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date					
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		Performance Standard					
recordkeeping, data	VOC ROC HAP	VOC content via label, product information sheet or MSDS material list: - mfg. ID - application method - type& specific use instructions - specific mixing ratio - max. VOC content as applied (including thinning solvents) purchase records: - type & volume monthly: - exclusive coating formulations daily: - volume - VOC content - resulting VOC emissions - summarize	- list of material - name & mfg ID - mixing instruction - ROC content - weight % water - weight % exempt compounds - solvent composition & density - solids content, less water as applied	- name & mfg ID - application method - material type & specific use - max ROC content - current mfg specification sheet, MSDS, or air quality data sheet - purchase records ID type or name and volume - monthly volume, ROC content, ROC emissions of each material used - annual summary	coating mfg data listed, on label, product data sheet, or MSDS - mfg name & type - mix ration by volume - VOC - VOC less water, less exempt - volume & method of application - vapor pressure of solvents	<i>- list of material</i> <i>- material type name/code/mfg</i> <i>- VOC content</i> <i>- mixing ratio</i> <i>- id each material type exceeding the VOC limits of the rule</i> <i>- product information sheet provided by the seller</i>	

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

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		Performance Standard					
recordkeeping, usage coating	VOC ROC HAP	see data above	above data + - daily use - report annual of each coating amount with each application equip., method of application, amount of other solvent and exempt solvent used, ROC of each solvent, amount of ROC, solids content	see data above	data above + coatings have been specified for their intended application - adhesion promotor - antichafe coating - electric/radiation effect - fuel tank adhesive - high temperature - impact resistant - optical anti-reflective - rain erosion resistant wing	see data above	
recordkeeping, usage solvent	VOC ROC HAP	see data above	above data - daily use - report annual of each coating amount with each application equip., method of application, amount of other solvent and exempt solvent used, ROC of each solvent	see data above	see data above	- <i>usage amounts monthly</i> - <i>usage amount for non- compliant material</i>	

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

Regulated Component	Pollutant	Rule/Measure/Date					
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		Performance Standard					
recordkeeping, usage stripper	VOC ROC HAP	see data above	see solvent above	see data above	see data above	see usage solvent above	
recordkeeping, alternative allowed	VOC ROC HAP	no	yes	no	no	yes Rule 107 AECF	
recordkeeping, control equipment	VOC ROC HAP	daily key operating & maintenance procedures		data above + daily records of key operating and maintenance procedures	daily on key operating parameters & maintenance procedures	- daily usage amount - O & M plan	
retention of records	VOC ROC HAP	5 years for Title V source; 2 years H&SC 42705 5 years	5 years for Title V source; 2 years H&SC 42705 2 years	5 years for Title V source; 2 years H&SC 42705 3 years	5 years for Title V source; 2 years H&SC 42705 2 years	5 years for Title V source; 2 years H&SC 42705 3 years	
methylene chloride reduction plan	exempt VOC	>					
qualification acceptance testing progress report	VOC						

Table I (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings ^(a)

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		Performance Standard					
compliance statement required	VOC ROC HAP				yes		

^(a) performance standard is grams of volatile organic compounds (VOC) per liter, less exempt compounds, less water, applied unless otherwise indicated

Table II (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG implementation 9/1/98 and 9/1/99 <i>NESHAP limits in italics implementation 9/15/98</i>
Exemption, general	<p>Exempt from rule: -aerosol cans subject to Reg 8 Rule 49 - electronic components 2/3/93 - assembled printed circuit boards 2/3/93 - paper-fabric-film coating which comply with Reg. 8 Rule 12 - stencil coatings subject to Reg 8 Rule 4 - solid film lubricant Reg 8 Rule 4 - test panels subject to Reg 8 Rule 4 - satellite coating subject Reg 8 Rule 4</p> <p>- Reg 8, Rule 51 Adhesives and Sealants do not apply</p>	<p>Exempt from rule: - aerosol coating products</p> <p>Exempt from VOC limit, solvent use and stripping, solvent cleaning and storage, transfer & control equipment requirements: -laboratories with R& D, Q/C and testing for production-related operations - temporary making coatings</p> <p>Exempt from VOC limits: - translucent coating applied on clear or transparent substrates - recoating of assembled aircraft at rework facilities if original coating formulation is used</p>	<p>Exempt from VOC coating limits, application equip., stripping, cleaning, maskant dip, list of compliant coating used RK, volume of coating used RK, control equip. RK :</p> <ul style="list-style-type: none"> - coatings applied using non-refillable aerosol spray containers - touch-up coating and stencil coatings - prepreg composite materials <p>Exempt from rule: - surface cleaning or stripping of aerospace components in equipment subject to 67.6 (degreasers)</p>	<p>Exempt from rule: - aerosol products - coating or cleaning of metal parts, including but not limited to tooling operations that are subject to Rule 74.12 Surface Coating of Metal Parts and Products</p>	<p>Too numerous to list all exemptions. Examples that may be appropriate that are also included in the district rules.</p> <p>Exempt from rule: - aerosol products - touch-up of scratched surfaces or damaged paint or maskant - touch-up of trimmed edges - R&D, Q/C, laboratory testing activities - antique aerospace vehicles</p> <p><i>NESHAP Exemptions:</i> <i>General: 63.741</i> <i>Cleaning: 63.744</i> <i>Primer & Topcoat: 63.745</i> <i>Stripping (depainting): 63.746</i></p>

Table II (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings

Rule/Measure	Rule/Measure				
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	to aerospace; Dan Belik 2/10/98 - Reg 1, section 110.3 excludes Aircraft 11/3/93 Applies only to aircraft take off and landing per Dan Belik	Exempt from VOC limits & transfer efficiency: -incidental corrosion maintenance repair coating operations at military facilities			<i>Chemical Milling Maskants: 63.747</i> CTG Exemptions: Appendix B. Model Rule
Exemption, low use facility	Exempt from weekly RK: -< 20 gallons per calendar year		Exempt from VOC coating limits, application equip., stripping, cleaning, maskant dip, list of compliant coating used RK, volume of coating used RK, control equip. RK : - coatings that are used in volumes of < 200 gallons per consecutive 12-month period of coatings provided a total of not more than 200 gallons per consecutive 12- month period of all such coatings including touch-up and stencil coatings,	Exempt from rule: - stationary sources that emit \leq 200 pounds or ROC during any rolling period of 12 consecutive calendar months from coatings, thinners, adhesives, stripper, substrate surface preparation, application equipment cleaning, or any other solvent uses associated with coating operations (emissions from degreasing units subject to Rule 74.6.1, 74.6.2 or 74.6.3, and aerosol	

Table II (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG implementation 9/1/98 and 9/1/99 <i>NESHAP limits in italics implementation 9/15/98</i>
			containers, and prepreg composite - coatings used exclusively for purposes of research and development, provided that the total is ≤ 50 gallons per consecutive 12-month period of all such non- compliant coatings	products are not included) - aerosol products	

Table II (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings

Rule/Measure	Rule/Measure				
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Exemption, low use aerospace		Exempt from VOC limit, solvent use and stripping, solvent cleaning and storage, transfer & control equipment requirements: - < 3 gallons of VOC- containing coating and solvents from aerospace assemble and component coating operation on each and every day of operation	Exempt from VOC coating limits, application equip., stripping, cleaning, maskant dip, list of compliant coating used RK, volume of coating used RK, control equip. RK : - low usage < 50 gallons per consecutive 12-month period of aerospace coating used; does not include touch-up, non-refillable aerosol spray containers, and prepreg composite Exempt from application method: - ≤ 1 gallon per day of aerospace coating		

Table II (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG implementation 9/1/98 and 9/1/99 <i>NESHAP limits in italics implementation 9/15/98</i>
Exemption, individual coating formulation	Exempt from rule: - < 20 gallons per formulation provided that the total is < 200 gallons per year	Exempt from VOC limits: - < 20 gallons per year provided that the total is < 200 gallons per year - adhesives with separate formulation < 10 gallons per year		Exempt from coating limits: - formulations < 20 gallons per calendar year, or - adhesives with separate formulations < 10 gallons per year provided that the total volume of noncomplying coatings (excluding noncomplying adhesives) used does not exceed 200 gallons annually	Exempt from HAP and VOC limits: separate formulations in volumes < 50 gallons per year subject to a maximum exemption of 200 gallons total annually

Table II (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings

Rule/Measure	Rule/Measure				
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Exemption, composition	Exempt from reg 8 rule 51: - adhesive and /or sealants products < 20 g/L of VOC	Exempt from RK: - materials that contain < 20 g/L of VOC	Exempt from list of coating used RK, volume of coating used RK, and control equipment RK: - adhesives, sealants and caulking and smoothing compounds, which have a VOC content of < 250 g/L of coating, less water and less exempt compounds Exempt from some maskant dip tank equipment requirements - ≤ 20 gallons maskant used per consecutive 12-month period - maskant VOC content ≤ 10% by weight	Exempt from transfer efficiency: - coatings with > 20 g/L ROC	<i>Exempt primers, topcoats, chemical milling maskants, strippers, and cleaning solvents: - HAP and VOC noncarcinogens < 1.0% or HAP and VOC carcinogens < 0.1 % Exempt from detailed RK primers & topcoats: - HAP or VOC content ≤ 250 g/L</i>

Table II (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG implementation 9/1/98 and 9/1/99 <i>NESHAP limits in italics implementation 9/15/98</i>
Exemption, adhesive & sealants	<p>Exempt from rule:</p> <ul style="list-style-type: none"> - adhesives that comply with Reg 8 Rule 4 - high-temperature-curing adhesive bonding primer cured >325°F , application is subject to Reg 8 Rule 4 -spray application equipment with limited access due to visual impairment which require 360° spray-gun nozzle extension, waterborn extreme performance interior top coating, adhesive bonding primers and pretreatment wash primers, textured finish coating <p>Exempt from Reg 8 Rule</p>		<p>Exempt from list of coating used RK, volume of coating used RK, and control equipment RK:</p> <ul style="list-style-type: none"> -adhesives and sealants which are applied outside application stations required to have a district permit - also see Exemption, content 		

Table II (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG implementation 9/1/98 and 9/1/99 <i>NESHAP limits in italics implementation 9/15/98</i>
	51: - adhesive and /or sealants products < 20 gallons per year				
Exemption, maskant			Exempt from some maskant dip tank equipment requirements - ≤ 20 gallons maskant used per consecutive 12-month period - maskant VOC content ≤ 10% by weight		
Exemption, surface cleaning		Exempt from VOC limit, solvent use and stripping, solvent cleaning and storage, transfer (application), & control requirements: - laboratories with R& D, Q/C and testing for production-related operations - temporary making coatings	Exempt from rule: - surface cleaning or or stripping of aerospace components in equipment subject to 67.6 (degreasers)	Exempt from surface cleaning: -cleaning of aerospace assembly and subassembly surfaces that are exposed to strong oxidizers or reducers such as nitrogen tetroxide, liquid oxygen or hydrazine	Exempt from handwipe cleaning: - R&D, Q/C, laboratory testing activities - cleaning of aerospace assembly and subassembly surfaces that are exposed to strong oxidizers or reducers such as nitrogen tetroxide, liquid oxygen or hydrazine

Table II (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG implementation 9/1/98 and 9/1/99 <i>NESHAP limits in italics implementation 9/15/98</i>
		Exempt from solvent & striping limits: - surface cleaning of solar cells, fluid systems, avionic equipment, and laser optics			<i>Exempt from flush cleaning: - semi-aqueous cleaners with ≥ 60 % water</i>
Exemption, stripper	Exempt from rule: - Tank-type stripper employing a sealing fluid at least four inches in depth which floats on the stripper surface and which consist of water or a fluid with a true vapor pressure of < 10 mm Hg (0.19 psia) at actual temperature	- see exemption surface cleaning	Exempt from rule: - surface cleaning or stripping of aerospace components in equipment subject to 67.6 (degreasers)		

Table II (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG implementation 9/1/98 and 9/1/99 <i>NESHAP limits in italics implementation 9/15/98</i>
Exemption, transfer efficiency	<ul style="list-style-type: none"> - surface areas with limited access due to visual impairment which require 360° spray-gun nozzle extension - waterborne extreme performance interior topcoats - adhesive bonding primers and pretreatment wash primers - textured finish coat 	<p>Exempt from VOC limits & transfer efficiency:</p> <ul style="list-style-type: none"> - incidental corrosion maintenance repair coating operations at military facilities <p>Exempt from transfer efficiency:</p> <ul style="list-style-type: none"> - touch-up and stencil coatings - marking coatings - airbrush operations 	<p>Exempt from application method:</p> <ul style="list-style-type: none"> - air brushes with a capacity of 3 ounces or less - ≤ 1 gallon per day of aerospace coating 		
Applicability, general	<p>surface preparation and coating of aerospace components and cleanup of aerospace coating equipment</p> <p><u>aerospace component</u> is the fabricated part, assembly of parts or completed unit of any aircraft, helicopter, missile or space vehicle</p>	<p>any operation associated with the manufacturing and assembling products for aircraft and space vehicles</p> <p>affected industries include commercial and military aircraft, satellite, space shuttle and rock manufacturers and their subcontractors</p>	<p>coating, masking, bonding, and paint stripping of aerospace components in operations where aerospace coating are used, to surface cleaning related to these aerospace coating operations, and to the cleanup of application equipment associated with these operations</p>	<p>manufacturing, assembling, coating, masking, bonding, paint stripping, and surface cleaning of aerospace components and the cleanup of equipment.</p> <p><u>aerospace component</u> means any raw material, partial or completed fabricated part, assembly of</p>	<p>aerospace facilities that manufacture or rework of commercial, civil, or military aerospace vehicles or components</p> <p>CTG: that are in areas of moderate, serious, or severe nonattainment that have the potential to emit greater than or equal to</p>

Table II (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG implementation 9/1/98 and 9/1/99 <i>NESHAP limits in italics implementation 9/15/98</i>
	including aerospace prototype or test model coating, solvent evaporative loss minimization, stripper, maskant for chemical processing (includes chemical milling, anodizing, aging, bonding, plating, etching, and other chemical operations) spray application equipment, control equipment alternative	maskant applicators, aircraft refinishers, aircraft fastener manufacturers, aircraft operators, and aircraft maintenance and service facilities <u>aerospace component</u> is the raw material, partial or completed fabricated part, assembly or parts, or completed unit of any aircraft or space vehicle and includes integral equipment such as models, mock-ups, prototype, molds, jigs, tooling, hardware jackets, and test compounds.	<u>aerospace component</u> means any raw material, partial or completed fabricated part, assembly of parts or completed unit of any aircraft, helicopter, missile or space vehicle, including mockups, test panels and prototypes	parts, or completed unit of any aircraft, helicopter, missile, or space vehicle, including mockups and prototypes	25 tons per year of VOCs or in extreme areas that have the potential to emit greater than or equal to 10 tons per year VOCs <i>NESHAP: that have the potential to emit 10 tons or more of any HAP or 25 tons or more of any combination of HAP</i> <u>aerospace vehicle or component</u> means any fabricated part, processed part, assembly of parts, or completed unit, with the exception of electronic components, of any aircraft including but not limited to ariplanes, helicopters, missiles, rockets, and space vehciles.

Table II (1 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings

Rule/Measure	Rule/Measure				
	BAAQMD Reg. 8 Rule 29 Aerospace Vehicle Parts & Products Coating 12/29/95	SCAQMD Rule 1124 Aerospace Assembly and Component Manufacturing Operations 12/13/96	SDCAPCD Rule 67.9 Aerospace Coating Operations 4/30/97	VCAPCD Rule 74.13 Aerospace Assembly and Component Mfg. Operations 9/10/96	U.S. EPA Aerospace Manufacturing and Rework Operations ^(a) CTG implementation 9/1/98 and 9/1/99 <i>NESHAP limits in italics implementation 9/15/98</i>
Applicability	adhesive, coating, maskant, cleaning & stripping	adhesive, coating, maskant, surface cleaning, equipment cleaning, stripping, fastners	adhesive, coating, maskant, surface cleaning, equipment cleaning, stripping, fastners	adhesive, coating, maskant, surface cleaning, equipment cleaning, stripping, fastners	adhesive, coating, maskant, surface cleaning, equipment cleaning, stripping, fastners
Comments	VOC does not exempt PCE	VOC exempts PCE	VOC exempts PCE	ROC does not exempt PCE	<i>NESHAP HAP does not exempt VOCs such as PCE, MeCl, TCA</i>

^(a) CTG final dated December 1997; released 3/27/98 63FR15006, effective date 9-1-98 for solvent cleaning; effective dated 9-1-99 for speciality coatings, application equipment & add-on control
NESHAP/CTG final 9/15/95 60FR45948, amended 2/9/96 61FR04903, 12/17/96 61FR66227, 3/27/98 63FR15006,
effective date 9/15/95; compliance for existing sources 9/1/98; compliance for new sources 6-6-94 or startup, (contains HAP & VOC emission limits)

Table II (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings

Rule/Measure	Rule/Measure				
	MDAQMD Rule 1118 10/28/96	ICAPCD Rule 425 3/3/92	SBCAPCD Rule 337 10/20/94	SJUAPCD Rule 423 12/19/96	SMAQMD Rule 456 9/5/96 <i>5/98 draft revision</i>
Exemption, general	<p>Exempt from rule: - hand heal aerosol cans</p> <p>Exempt from coating limits: - recoating of assembled aircraft at rework facilities if the original coatings formulation is used - laboratories R&D, QC, testing of production-related operations - airbrush application for stenciling, lettering or other ID markings that cover less than 20 % of the vehicle, part or product's exterior surface</p>	<p>Exempt from rule except for RK: - touch-up - stencil - non-refillable hand held aerosol spray cans - prepreg composite materials</p>	<p>Exempt from rule: - non-refillable aerosol containers with capacities of ≤ 18 ounces</p>	<p>Exempt from rule: - jet engine or rocket engine flushing operations using any solvent other than trichloroethylene</p> <p>Exempt from requirements and administrative requirements including RK: - laboratories R & D, QC, testing for production-related operations (subject to operational records, data and calculations as determined by the APCO)</p> <p>Exempt from storage requirements: - hand held aerosol cans</p>	<p>Exempt from rule: - non-refillable aerosol containers</p>

Table II (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings

Rule/Measure	Rule/Measure				
	MDAQMD Rule 1118 10/28/96	ICAPCD Rule 425 3/3/92	SBCAPCD Rule 337 10/20/94	SJUAPCD Rule 423 12/19/96	SMAQMD Rule 456 9/5/96 <i>5/98 draft revision</i>
Exemption, low use facility					Exempt application equipment: - hand held spray container with non-refillable propellant canisters where total facility use is \leq 10 gallons

Table II (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings

Rule/Measure	Rule/Measure				
	MDAQMD Rule 1118 10/28/96	ICAPCD Rule 425 3/3/92	SBCAPCD Rule 337 10/20/94	SJUAPCD Rule 423 12/19/96	SMAQMD Rule 456 9/5/96 <i>5/98 draft revision</i>
Exemption, low use aerospace		Exempt from coating, storage, solvent, application, control limits: ≤ 3 gallons		Exempt from requirements: ≤ 4 gallons of VOC containing products per day	Exempt from coating & stripping limits: ≤ 200 gallons per calendar year
Exemption, individual coating formulation	Exempt from rule except for RK: < 50 gallons per year provided the total volume of non-complying coatings does not exceed 200 gallons annually	Exempt from coating limits (requires request & approval of APCO): < 20 gallons per year provided that the total volume does not exceed 50 gallons annually	Exempt from coating limits: < 20 gallons per year provided that the total volume of non-complying coatings does not exceed 200 gallons annually	Exempt from coating limits: < 21 gallon on any day or 20 gallons in any year provided the APCO is notified in writing that a substitute complying coating are not available	
Exemption, composition				Exempt from storage requirements: < 20 g/L VOC	
Exemption, adhesive & sealants				separate formulations < 0.5 gallons on any day or 10 gallons in any calendar year provided the APCO is notified in writing that a substitute complying coating are not available	Exempt from rule: paper, fabric, or film adhesives regulated by Rule 460

Table II (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings

Rule/Measure	Rule/Measure				
	MDAQMD Rule 1118 10/28/96	ICAPCD Rule 425 3/3/92	SBCAPCD Rule 337 10/20/94	SJUAPCD Rule 423 12/19/96	SMAQMD Rule 456 9/5/96 <i>5/98 draft revision</i>
Exemption, maskant					
Exemption, surface cleaning					<ul style="list-style-type: none"> - space vehicles & space vehicle components designed to travel beyond the earth's atm - cleaning & surface activation during adhesive bonding

Table II (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings

Rule/Measure	Rule/Measure				
	MDAQMD Rule 1118 10/28/96	ICAPCD Rule 425 3/3/92	SBCAPCD Rule 337 10/20/94	SJUAPCD Rule 423 12/19/96	SMAQMD Rule 456 9/5/96 <i>5/98 draft revision</i>
Exemption, stripper					
Exemption, transfer efficiency	- touch-up & repair		- touch-up & repair		<ul style="list-style-type: none"> - touch-up and repair - detail guns - template - stencil - stamp - hand lettering to add designs, letters, or numbers to an aerospace component - hand held spray container with non-refillable propellant canisters where total facility use is ≤ 10 gallons
Applicability, general	any person who manufactures or reworks aerospace vehicles by applying or specifying the use of surface coatings for aerospace vehicles parts and products	coating, masking, surface cleaning, and paint stripping of aerospace components and the cleanup of equipment associated with these operations	any person who manufactures, applies or specifies the use of surface coating for aircraft or aerospace vehicle parts and products	manufacturing, assembling, coating, masking, bonding, paint stripping, surface cleaning, service, and maintenance of aerospace components, and the cleanup of equipment associated with these operations	coating of aerospace components including coating removal (stripping), surface preparation and cleanup operations by any person

Table II (2 of 2)
Identification of Performance Standards
Source Category: Aerospace Coatings

Rule/Measure	Rule/Measure				
	MDAQMD Rule 1118 10/28/96	ICAPCD Rule 425 3/3/92	SBCAPCD Rule 337 10/20/94	SJUAPCD Rule 423 12/19/96	SMAQMD Rule 456 9/5/96 <i>5/98 draft revision</i>
Applicability	adhesives, coating, maskants, cleaning solvents, strippers	adhesives, coating, masking, surface cleaning, paint stripping	adhesive, coating, maskant, stripper	adhesive, coating, maskant, fastener, surface cleaning, stripper	adhesive, coating, maskant, surface cleaning, stripper
Comments	exempts PCE	does not exempts PCE	Rule 102 does not exempt PCE	Rule 2 does not exempt PCE (ROC)	Rule 101 exempts PCE

APPENDIX

IDENTIFICATION OF PERFORMANCE STANDARDS FOR EXISTING STATIONARY SOURCES

APPENDIX: IDENTIFICATION OF PERFORMANCE STANDARDS FOR EXISTING STATIONARY SOURCE CATEGORIES

TABLE OF CONTENTS

SOURCE CATEGORY	PAGE	SOURCE CATEGORY	PAGE
Adhesives and Sealants	A-1	Marine Coatings	M-1
Aerospace Coatings	B-1	Metal Parts and Products (Non-architectural)	N-1
Architectural and Industrial Maintenance Coatings	C-1	Pleasure Craft Coating Operations	O-1
Auto Refinishing	D-1	Polyester Resin Operations	P-1
Bakery Ovens	E-1	Polymeric Foam Product Manufacturing	Q-1
Fugitive Emissions from Chemical Plants	F-1	Portland Cement Kilns	R-1
Fugitive Emissions from Oil and Gas Production	G-1	Refinery Boilers	S-1
Fugitive Emissions from Petroleum Refineries	H-1	Restaurants, Chain Driven Charbroilers	T-1
Gasoline Terminals and Bulk Plants	I-1	Small Industrial Boilers	U-1
Graphic Arts	J-1	Solvent Cleaning and Degreasing	V-1
Industrial Boilers	K-1	Surface Coating of Plastic Parts and Products	W-1
Large Water Heaters and Small Boilers	L-1	Wood Product Coatings	X-1

Notes on Tables

For the purpose of keeping this summary concise, there are many instances where a district's rule with equivalent performance standards for a particular subcategory is not mentioned. If a rule is cited as most effective, the rule is considered at least as effective and not necessarily more effective than other district rules.

In the following tables, an “x” is placed in the small column to the left of the most effective performance standard. “Most effective” can be defined as the best control efficiency, or resulting in the greatest percentage of emission reductions from the particular source category (without taking into account other factors such as exemptions and applicability). In many cases, more than one “x” is indicated because performance standards in different district rules are equivalent. For instance, two districts may have the identical emission limit, measured in grams/liter, for a coating category. Occasionally, more than one “x” may be indicated in cases where performance standards may not be identical, but it is hard to reach any definitive conclusion as to which rule is most effective. Certain tables include an ‘nq’ in the column on the left, meaning ‘not quantifiable.’

For each source category, there is a Table I and a Table II. Table I presents the emission limitation, control efficiency, or other similar measure. Table II lists exemptions, applicability, and comments. Also, where there are more than five references, the tables are broken into two parts (e.g., Table I (1 of 2); Table I (2 of 2)).

Architectural and Industrial Maintenance Coatings

Table I
Identification of Performance Standards
Source Category: Architectural and Industrial Maintenance Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
		U.S. EPA, National VOC Standards for Architectural Coatings, 63 FR 176: 48848, 9/11/98 (rule effective date 9/13/99)			ARB-CAPCOA Suggested Control Measure for Architectural Coatings, adopted 1977, last amended May 1989		SCAQMD Rule 1113, Architectural Coatings, adopted 9/77, last amended 11/96				
		Performance Standard									
Antenna	VOC	X	530 g/l								
Anti-Fouling	VOC	X	450 g/l								
Anti-Graffiti	VOC		600 g/l	X	340 g/l						
Bituminous & Mastics	VOC	X	500 g/l								
Bond Breakers	VOC		600 g/l	X	350 g/l	X	350 g/l				
Calcimine Recoaters	VOC	X	475 g/l								
Chalkboard Resurfacing	VOC	X	450 g/l								
Concrete Curing Compounds	VOC	X	350 g/l	X	350 g/l	X	350 g/l				
Concrete Curing and Sealing Compounds	VOC	X	700 g/l								
Concrete Protective	VOC	X	400 g/l								
Concrete Surface Retarders	VOC	X	780 g/l								
Conversion Varnish	VOC	X	725 g/l								

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Regulated Component	Pollutant	Rule/Measure/Date									
		U.S. EPA, National VOC Standards for Architectural Coatings, 63 FR 176: 48848, 9/11/98 (rule effective date 9/13/99)		ARB-CAPCOA Suggested Control Measure for Architectural Coatings, adopted 1977, last amended May 1989		SCAQMD Rule 1113, Architectural Coatings, adopted 9/77, last amended 11/96					
		Performance Standard									
Dry Fog	VOC	X	400 g/l	X	400 g/l	X	400 g/l				
Extreme High Durability	VOC	X	800 g/l								
Faux Finishing/Glazing (Japans)	VOC	X	700 g/l			X	700 g/l (1999-350 g/l)				
Fire Proofing Exterior	VOC					X	450 g/l (1999-350 g/l)				
Fire Retardant-Clear	VOC			X	650 g/l	X	650 g/l				
Fire Retardant-Pigmented	VOC			X	350 g/l	X	350 g/l				
Fire Retardant/Resistive-Clear	VOC	X	850 g/l								
Fire Retardant/Resistive-Opaque	VOC	X	450 g/l								
Flat-Interior/Exterior	VOC		250 g/l		250 g/l	X	250 g/l (2001-100 g/l) (2008-50 g/l)				

Table I
Identification of Performance Standards
Source Category: Architectural and Industrial Maintenance Coatings

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		U.S. EPA, National VOC Standards for Architectural Coatings, 63 FR 176: 48848, 9/11/98 (rule effective date 9/13/99)		ARB-CAPCOA Suggested Control Measure for Architectural Coatings, adopted 1977, last amended May 1989		SCAQMD Rule 1113, Architectural Coatings, adopted 9/77, last amended 11/96					
		Performance Standard									
Floor	VOC	X	400 g/l								
Flow	VOC	X	650 g/l								
Form Release Compounds	VOC		450 g/l	X	250 g/l						
Graphic Arts (sign paints)	VOC	X	500 g/l	X	500 g/l	X	500 g/l				
Heat Reactive	VOC	X	420 g/l								
High Temperature	VOC		650 g/l	X	420 g/l						
Impacted Immersion	VOC	X	780 g/l								
Industrial Maintenance	VOC		450 g/l	X	340 g/l						

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Source Category: Architectural and Industrial Maintenance Coatings

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		Performance Standard									
Industrial Maintenance Primers, Topcoats and Materials (Alkyds, Catalyzed Epoxy, Bituminous, Inorganic Polymers, Vinyl Chloride Polymers, Chlorinated Rubber, Acrylic Polymers, Urethane Polymers, Silicones, Unique Vehicles)	VOC					X	420 g/l				
Lacquer	VOC				680 g/l	X	550 g/l (2005-275 g/l)				
Lacquer (including lacquer sanding sealers)	VOC	X	680 g/l								
Lacquer-Pigmented	VOC					X	550 g/l (2005-275 g/l)				
Magnesite Cement	VOC		600 g/l	X	450 g/l		600 g/l (1999-450 g/l)				

Table I
Identification of Performance Standards
Source Category: Architectural and Industrial Maintenance Coatings

Regulated Component	Pollutant	Rule/Measure/Date											
		U.S. EPA, National VOC Standards for Architectural Coatings, 63 FR 176: 48848, 9/11/98 (rule effective date 9/13/99)			ARB-CAPCOA Suggested Control Measure for Architectural Coatings, adopted 1977, last amended May 1989		SCAQMD Rule 1113, Architectural Coatings, adopted 9/77, last amended 11/96						
		Performance Standard											
Mastic Texture	VOC	X	300 g/l	X	300 g/l	X	300 g/l						
Metallic Pigmented	VOC	X	500 g/l	X	500 g/l	X	500 g/l						
Multi-Color	VOC		580 g/l		420 g/l	X	250 g/l						
Nonferrous Ornamental Lacquers & Surface Protectants	VOC	X	870 g/l										
Non-Flat Interior/Exterior	VOC		380 g/l	X	250 g/l	X	250 g/l						
Nuclear	VOC	X	450 g/l										
Pre-Treatment Wash Primer	VOC		780 g/l	X	420 g/l		780 g/l						
Primers & Undercoaters	VOC	X	350 g/l										
Primers, Sealers & Undercoaters	VOC			X	350 g/l	X	350 g/l						
Quick Dry Enamels	VOC		450 g/l			X	400 g/l						

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		Performance Standard									
Quick Dry Primers, Sealers and Undercoaters	VOC		450 g/l			X	350 g/l				
Repair & Maintenance Thermoplastic	VOC	X	650 g/l								
Roof	VOC	X	250 g/l		300 g/l		300 g/l				
Rust Preventative	VOC	X	400 g/l								
Sanding Sealer (lacquer)	VOC		680 g/l	X	350 g/l	X	350 g/l				
Sanding Sealer (non-lacquer)	VOC	X	550 g/l								
Sealers (including clear wood sealers)	VOC	X	400 g/l								
Shellacs-Clear	VOC	X	730 g/l	X	730 g/l	X	730 g/l				
Shellacs-Opaque	VOC	X	550 g/l								

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		U.S. EPA, National VOC Standards for Architectural Coatings, 63 FR 176: 48848, 9/11/98 (rule effective date 9/13/99)			ARB-CAPCOA Suggested Control Measure for Architectural Coatings, adopted 1977, last amended May 1989		SCAQMD Rule 1113, Architectural Coatings, adopted 9/77, last amended 11/96				
		Performance Standard									
Shellacs-Pigmented	VOC			X	550 g/l	X	550 g/l				
Stains-Clear & Semitransparent	VOC		550 g/l			X	350 g/l				
Stains-Semitransparent	VOC			X	350 g/l						
Stains-Opaque	VOC	X	350 g/l	X	350 g/l	X	350 g/l				
Stains-Low Solids	VOC	X	120 g/l			X	120 g/l				
Stain Controllers	VOC	X	720 g/l								
Swimming Pool-General	VOC		600 g/l	X	340 g/l	X	340 g/l				
Swimming Pool-Repair & Maintenance	VOC			X	340 g/l		650 g/l				
Thermoplastic Rubber & Mastics	VOC	X	550 g/l								
Traffic	VOC	X	150 g/l		250 g/l	X	150 g/l				
Varnishes	VOC		450 g/l	X	350 g/l	X	350 g/l				
Water Proofing Sealers	VOC		600 g/l	X	400 g/l	X	400 g/l				

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		Performance Standard											
Wood Preservatives-Below Ground	VOC		550 g/l	X	350 g/l	X	350 g/l						
Wood Preservatives-Clear & Semitransparent	VOC		550 g/l	X	350 g/l	X	350 g/l						
Wood Preservatives-Low Solids	VOC	X	120 g/l			X	120 g/l						
Wood Preservatives-Opaque	VOC	X	350 g/l	X	350 g/l	X	350 g/l						
Zone Marking Compounds	VOC	X	450 g/l										

Notes:

1. Eighteen of California's 35 air pollution control districts have adopted architectural coating rules. In general, these districts are consistent with the 1989 ARB-CAPCOA Suggested Control Measure.
2. Districts that have adopted architectural coating rules are as follows: Antelope Valley APCD, Bay Area AQMD, Butte County AQMD, Colusa County APCD, El Dorado County APCD, Feather River AQMD, Imperial County APCD, Kern County APCD, Mojave Desert AQMD, Monterey Bay Unified APCD, Placer County APCD, Sacramento Metro AQMD, San Diego County APCD, Santa Barbara County APCD, San Joaquin Valley Unified APCD, South Coast AQMD, and Ventura County APCD. Yolo-Solano AQMD's rule was adopted by the ARB in 1979 and contains some outdated provisions.
3. Overall the SCAQMD Rule 1113 represents the most stringent rule when compared to the 1989 ARB-CAPCOA SCM, other air districts, and the U.S. EPA national rule.
4. Both the SCAQMD Rule 1113 and ARB-CAPCOA SCM have fallback provisions which set a VOC content limit at 250 grams per liter if a coating does not fall into any of the categories identified in the above worksheet. The U.S. EPA rule contains a provision that if none of the specific category definitions applies to a coating, it falls into the flat or non-flat category, depending on the gloss level.

Table II
Identification of Performance Standards
Source Category: Architectural and Industrial Maintenance Coatings

Rule/Measure	Rule/Measure				
	U.S. EPA National VOC Rule for Architectural Coatings, 63 FR 176:48848, 9/11/98 (rule effective date 9/13/99)	ARB-CAPCOA Suggested Control Measure for Architectural Coatings, adopted 1977, last amended May 1989	SCAQMD Rule 1113, Architectural Coatings, adopted 9/77, last amended 11/96		
Exemptions	<p>Coatings manufactured for sales or distribution to architectural coating markets outside the U.S.</p> <p>Coatings manufactured prior to 9/13/99.</p> <p>Coatings sold in nonrefillable aerosol containers</p> <p>Coatings collected and redistributed at a paint exchange.</p> <p>Coatings sold in containers with a volume of one liter or less.</p> <p>Exceedance fee provision allows compliance by paying a fee in lieu of meeting the VOC content limits.</p> <p>Tonnage exemption allows manufacturers and importers to sell or distribute limited quantities of architectural</p>	<p>Architectural coatings manufactured for use outside of the District or for shipment to other manufacturers for repackaging.</p> <p>Architectural coatings supplied in and applied from containers of one liter or less capacity, and offered for sale in containers of such capacity prior to (date of rule adoption).</p> <p>Architectural coatings sold in non-refillable aerosol containers with capacities of one liter or less.</p> <p>Emulsion-type bituminous pavement sealers.</p>	<p>Architectural coatings in containers with capacities of one quart or less, provided the manufacturer submits an annual report which will allow the Executive Officer to monitor the use of this exemption.</p> <p>Architectural coatings sold in the District for shipment outside the District or for shipment to other manufacturers for repackaging.</p> <p>Emulsion type bituminous pavement sealers.</p> <p>Aerosol coating products.</p> <p>Use of stains and lacquers in all areas of the District at an elevation of 4,000 feet or more.</p>		

Table II
Identification of Performance Standards
Source Category: Architectural and Industrial Maintenance Coatings

Rule/Measure	Rule/Measure				
	U.S. EPA National VOC Rule for Architectural Coatings, 63 FR 176:48848, 9/11/98 (rule effective date 9/13/99)	ARB-CAPCOA Suggested Control Measure for Architectural Coatings, adopted 1977, last amended May 1989	SCAQMD Rule 1113, Architectural Coatings, adopted 9/77, last amended 11/96		
	coatings that do not comply with the VOC content limits based on the total mass of VOC contained in all exempt coatings. Recycled coatings option allows calculation of an adjusted-VOC content for coatings that contain a percentage of post-consumer (recycled) coating.				

Table II
Identification of Performance Standards
Source Category: Architectural and Industrial Maintenance Coatings

Rule/Measure	Rule/Measure				
	U.S. EPA National VOC Rule for Architectural Coatings, 63 FR 176:48848, 9/11/98 (rule effective date 9/13/99)	ARB-CAPCOA Suggested Control Measure for Architectural Coatings, adopted 1977, last amended May 1989	SCAQMD Rule 1113, Architectural Coatings, adopted 9/77, last amended 11/96		
Applicability	Coatings manufactured on or after 9/13/99 for sale or distribution in the U.S. (for coatings registered under the Federal Insecticide, Fungicide, and Rodenticide Act, the effective date is 3/13/00).	Any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures any architectural coating for use within the District.	Any person who supplies, sells, offers for sale, applies, solicits the application of, or manufactures for use in the District any architectural coating intended to be applied to stationary structures or their appurtenances, and to mobile homes, pavements or curbs.		
Comments	There are recordkeeping requirements associated with the exceedance fee provision, tonnage exemption, and recycled coatings option.				

Auto Refinishing

Notes: On September 11, 1998, the United States Environmental Protection Agency published in the Federal Register the National Volatile Organic Compound (VOC) Emission Standards for Automobile Refinish Coatings (national rule). The national rule applies to manufacturers and importers of automobile refinish coatings or coating components formulated for sale or distribution in the United States. The VOC limits in the national rule can be met easily by automotive refinish coating manufacturers. There are already coatings available in California which have been successfully used by body shops for several years that meet these limits. The national rule should not have any impact on the ability of body shops in California to apply acceptable paint jobs. The national rule has not been included in this document.

In contrast to the national rule, California district rules make the coating user responsible for using coatings which meet the VOC content limits in a rule, and impose recordkeeping requirements to track the type and amount of coatings used.

Table I
Identification of Performance Standards
Source Category: Auto Refinishing

Regulated Component	Pollutant	Rule/Measure/Date									
		BAAQMD 8-45 (11/6/96)		SCAQMD 1151 (6/13/97)		RACT (5/95)		BARCT (5/95)		San Luis Obispo 423 9/25/96	
		Performance Standard									
Pretreatment Wash Primer	VOCs										
Automobiles, trucks,vans			780 g/l		780 g/l		780 g/l		780 g/l		780 g/l
Mobile equipment, buses			780 g/l		780 g/l		780 g/l		780 g/l	X	780 g/l (cannot use pretreatment wash primer in excess of 10% by volume of the amount of primer used)
Precoat	VOCs										
Automobiles, trucks,vans			600 g/l				780 g/l		600 g/l		precoat not allowed for auto, trucks, vans
Mobile equipment, buses			600 g/l				780 g/l		600 g/l		600 g/l
			(facilities cannot use precoat in excess of 25% of the amount of waterborne primer surfacer used)	X	precoat not allowed for any categories		(facilities cannot use precoat in excess of 25% of the amount of waterborne primer surfacer used)		(facilities cannot use precoat in excess of 25% of the amount of waterborne primer surfacer used)		(facilities cannot use precoat in excess of 25% of the amount of primer used)

Table I
Identification of Performance Standards
Source Category: Auto Refinishing

Regulated Component	Pollutant	Rule/Measure/Date									
		BAAQMD 8-45 (11/6/96)		SCAQMD 1151 (6/13/97)		RACT (5/95)		BARCT (5/95)		San Luis Obispo 423 9/25/96	
		Performance Standard									
Extreme Performance						x	750 g/l				
Mobile equipment, buses							750 g/l				
Primer Sealer	VOCs										
Automobiles, trucks,vans			420 g/l		340 g/l		420 g/l		420 g/l		600 g/l
Mobile equipment, buses			340 g/l	X	250 g/l		340 g/l		340 g/l		340 g/l
Primer Surfacer	VOCs										
Automobiles, trucks,vans			250 g/l		250 g/l		340 g/l		250 g/l		600 g/l
Mobile equipment, buses		X	250 g/l	X	250 g/l		340 g/l	X	250 g/l		340 g/l

Table I
Identification of Performance Standards
Source Category: Auto Refinishing

Regulated Component	Pollutant	Rule/Measure/Date									
		BAAQMD 8-45 (11/6/96)		SCAQMD 1151 (6/13/97)		RACT (5/95)		BARCT (5/95)		San Luis Obispo 423 9/25/96	
		Performance Standard									
Solid Color Topcoat	VOCs										
Automobiles, trucks,vans		X	420 g/l	X	420 g/l		600 g/l	X	420 g/l	X	420 g/l
Mobile equipment, buses			-		-		420 g/l		420 g/l		-
Metallic/Iridescent Topcoat	VOCs										
Automobiles, trucks,vans			520 g/l	X	420 g/l		600 g/l		520 g/l		540 g/l
Mobile equipment, buses			420 g/l		340 g/l		420 g/l		420 g/l		420 g/l
Multicolored	VOCs		-				-		-		-
Automobiles, trucks,vans				X	685 g/l						
Mobile equipment, buses					685 g/l						

Table I
Identification of Performance Standards
Source Category: Auto Refinishing

Regulated Component	Pollutant	Rule/Measure/Date									
		BAAQMD 8-45 (11/6/96)		SCAQMD 1151 (6/13/97)		RACT (5/95)		BARCT (5/95)		San Luis Obispo 423 9/25/96	
		Performance Standard									
Multicolored Multistage Automobiles, trucks,vans Mobile equipment, buses	VOCs		-				-		-		-
				X	420 g/l						
					-						
Multi-Stage Topcoat Automobiles, trucks,vans Mobile equipment, buses	VOCs		540 g/l		420 g/l		600 g/l		540 g/l		540 g/l
			-		340 g/l		420 g/l		420 g/l		-
General Topcoat Automobiles, trucks,vans Mobile equipment, buses	VOCs		-		420 g/l		-		-		-
			420 g/l		X	340 g/l		-		-	420 g/l

Table I
Identification of Performance Standards
Source Category: Auto Refinishing

Regulated Component	Pollutant	Rule/Measure/Date									
		BAAQMD 8-45 (11/6/96)		SCAQMD 1151 (6/13/97)		RACT (5/95)		BARCT (5/95)		San Luis Obispo 423 9/25/96	
		Performance Standard									
Camouflage Automobiles, trucks,vans Mobile equipment, buses	VOCs	x	- 420 g/l			x	- 420	x	- 420	x	420 g/l
Speciality Coatings	VOCs	X	840 g/l (use of speciality coatings, except anti- glare and safety coatings, shall not exceed 5% of all coatings applied on a monthly basis.)		840 g/l	X	840 g/l (use of speciality coatings, except anti- glare and safety coatings, shall not exceed 5% of all coatings applied on a monthly basis.)	X	840 g/l (use of speciality coatings, except anti- glare and safety coatings, shall not exceed 5% of all coatings applied on a monthly basis.)	X	840 g/l (use of speciality coatings, except anti- glare and safety coatings, shall not exceed 5% of all coatings applied on a monthly basis.)
Temporary Protective Coating	VOCs	X	60 g/l	X	60 g/l	X	60 g/l	X	60 g/l	X	60 g/l
Surface Preparation Solvent	VOCs		72 g/l	X	70 g/l		72 g/l		72 g/l		200 g/l
Surface Prep Solvent for Plastic Parts	VOCs	X	780 g/l			X	780 g/l	X	780 g/l	X	780 g/l

Table I
Identification of Performance Standards
Source Category: Auto Refinishing

Regulated Component	Pollutant	Rule/Measure/Date									
		BAAQMD 8-45 (11/6/96)		SCAQMD 1151 (6/13/97)		RACT (5/95)		BARCT (5/95)		San Luis Obispo 423 9/25/96	
		Performance Standard									
Spray Booth	particulate		Facilities may not apply topcoats outside spray booths		-		-		-	X	All coatings must be applied in a spray booth. The booth must have a 95% control efficiency.
Transfer Efficiency	VOCs	X	must use HVLP or electrostatic application methods, or a method that has equivalent transfer efficiency of HVLP.	X	must use HVLP or electrostatic application methods, or a method that has equivalent transfer efficiency of HVLP.	X	Must use HVLP, electrostatic application methods, or an application method with 65% transfer efficiency	X	Must use HVLP, electrostatic application methods, or an application method with 65% transfer efficiency	X	Must use HVLP, electrostatic application methods, or an application method with 65% transfer efficiency
Clean-up of Equipment	VOCs	X	facilities must use equipment that collects spent solvents, and minimizes their evaporation	X	facilities must use wipe cleaning, spray bottles, enclosed cleaning device, or approved clean-up equipment	X	must use enclosed cleaning equipment	X	must use enclosed cleaning equipment	X	must use an enclosed cleaning system, or approved alternative may be used if used w/ solvents with a composite vapor pressure less than 45 mm Hg at 20° C.

Table I
Identification of Performance Standards
Source Category: Auto Refinishing

Regulated Component	Pollutant	Rule/Measure/Date									
		BAAQMD 8-45 (11/6/96)		SCAQMD 1151 (6/13/97)		RACT (5/95)		BARCT (5/95)		San Luis Obispo 423 9/25/96	
		Performance Standard									
Prohibition of Specification	VOCs	X	no person shall specify the use of a coating within the district if application of the coating results in a violation of the rule.	X	no person shall specify the use of a coating within the district if application of the coating results in a violation of the rule.	X	no person shall specify the use of a coating within the district if application of the coating results in a violation of the rule.	X	no person shall specify the use of a coating within the district if application of the coating results in a violation of the rule.	X	no person shall specify the use of a coating within the district if application of the coating results in a violation of the rule.
Prohibition of Sale	VOCs	X	no person shall sell within the district any coating if such a product is prohibited by rule.	X	no person shall sell within the district any coating if such a product is prohibited by rule.		no person shall sell within the district any coating if such a product is prohibited by rule. (Optional)		no person shall sell within the district any coating if such a product is prohibited by rule. (Optional)	X	no person shall sell within the district any coating if such a product is prohibited by rule.
Solvent Loss Minimization	VOCs	X	use closed containers for storage and disposal of cleaning rags and close solvent-containing containers when not in use	X	use closed containers for storage and disposal of cleaning rags and close solvent-containing containers when not in use	X	use closed containers for storage and disposal of cleaning rags and close solvent-containing containers when not in use	X	use closed containers for storage and disposal of cleaning rags and close solvent-containing containers when not in use	X	use closed containers for storage and disposal of cleaning rags and close solvent-containing containers when not in use
Coating Components	cadmium, hexavalent chromium		-	x	cannot add hexavalent chromium or cadmium to coatings		-		-		-

Table I
Identification of Performance Standards
Source Category: Auto Refinishing

Regulated Component	Pollutant	Rule/Measure/Date									
		BAAQMD 8-45 (11/6/96)		SCAQMD 1151 (6/13/97)		RACT (5/95)		BARCT (5/95)		San Luis Obispo 423 9/25/96	
		Performance Standard									
Control Equipment	VOCs	X	may use control equipment with 85% control efficiency instead of required low-VOC coatings	X	if a facility uses control equipment instead of required low-VOC coatings, emissions must be controlled to a level equivalent to use of low-VOC coatings	X	may use control equipment with 85% control efficiency instead of required low-VOC coatings. The overall emissions reductions must be equivalent to emissions reductions achieved by use of low-VOC coatings.	X	may use control equipment with 85% control efficiency instead of required low-VOC coatings. The overall emissions reductions must be equivalent to emissions reductions achieved by use of low-VOC coatings	X	if control equipment is used instead of low-voc coatings, the equipment must capture at least 90% of organic emissions, and have a destruction efficiency of at least 95%.
Compliance Statement		n q	Manufacturer shall provide on container of all coatings and solvents or accompanying MSDS, the VOC content and mixing instructions for the coating or solvent.							n q	Manufacturer shall provide on container of all coatings and solvents or accompanying MSDS, the VOC content and mixing instructions for the coating or solvent.

Table I
Identification of Performance Standards
Source Category: Auto Refinishing

Regulated Component	Pollutant	Rule/Measure/Date											
		BAAQMD 8-45 (11/6/96)		SCAQMD 1151 (6/13/97)		RACT (5/95)		BARCT (5/95)		San Luis Obispo 423 9/25/96			
		Performance Standard											
HVLP Marking		n	A person shall not sell HVLP equipment without markings denoting the maximum inlet air pressure at which gun will operate according to the provisions of the rule.	q		n	A person shall not sell HVLP equipment without markings denoting the maximum inlet air pressure at which gun will operate according to the provisions of the rule.	q	A person shall not sell HVLP equipment without markings denoting the maximum inlet air pressure at which gun will operate according to the provisions of the rule.	n	A person shall not sell HVLP equipment without markings denoting the maximum inlet air pressure at which gun will operate according to the provisions of the rule.	q	A person shall not sell HVLP equipment without markings denoting the maximum inlet air pressure at which gun will operate according to the provisions of the rule.

Table I
Identification of Performance Standards
Source Category: Auto Refinishing

Regulated Component	Pollutant	Rule/Measure/Date									
		BAAQMD 8-45 (11/6/96)	SCAQMD 1151 (6/13/97)	RACT (5/95)	BARCT (5/95)	San Luis Obispo 423 9/25/96					
		Performance Standard									
Recordkeeping	VOCs	n q	- all coatings and components used; - mix ratio - VOC content of coatings used - on a weekly basis, record: coating and mix ratio; quantity of coatings used; - on a daily basis, record: quantity and mix ratio of speciality coating used - record on a monthly basis cleanup and surface prep solvent	n q	- amount of coatings, coating components, solvents, and adhesives used -VOC content of coatings, coating components, solvents, and adhesives used - vapor pressure of solvents	n q	- type of coating used and the type of vehicle or equipment to which coating was applied - coating, catalyst, additives, and reducer used - mix ration VOC content of coatings as applied - monthly records showing the type and amount of solvent used for cleanup and preparation	n q	- type of coating used and the type of vehicle or equipment to which coating was applied - coating, catalyst, additives, and reducer used - mix ratio VOC content of coatings as applied - monthly records showing the type and amount of solvent used for cleanup and preparation	n q	- coating manufacturer - coating, catalyst, and reducer used - mix ratio - VOC content -coating category - purchase records - summary of the monthly VOC emissions categorized by type, and indicating whether hex chrome is present - number of utility bodies coated

Table II
Identification of Performance Standards
Source Category: Auto Refinishing

Rule/Measure	Rule/Measure				
	BAAQMD 8-45	SCAQMD 1151	RACT	BARCT	San Luis Obispo 423
Exemptions	<p>- transfer efficiency provisions shall not apply to application of high viscosity or thixotropic coatings with application equipment that is supplied with and is an integral part of the coating container or to the application of corrosion protective coatings to enclosed interior spaces.</p>	<p>- VOC limits shall not apply to coatings applied for educational purposes at coating training centers, provided that VOC emissions from noncompliant coatings at the training center does not exceed 12 lbs/day.</p>	<p>- Original Equipment Manufacturers</p>	<p>- Original Equipment Manufacturers</p>	<p>- transfer efficiency, spray booth, and recordkeeping provisions shall not apply to painting done at a one or two family dwellings if the person apply the coating owns the vehicle</p> <p>- spray booth requirement shall not apply to touch-up or spot-primering operations that do not exceed nine sq. Ft per vehicle</p> <p>- operations that cannot be placed in a spray booth may be exempted on a case-by-case basis</p> <p>- transfer efficiency requirements do not apply to the application of chip resistant or underbody coatings</p>

Table II
Identification of Performance Standards
Source Category: Auto Refinishing

Rule/Measure	Rule/Measure				
	BAAQMD 8-45	SCAQMD 1151	RACT	BARCT	San Luis Obispo 423
Applicability	Facilities that finish or refinish motor vehicles, mobile equipment and their parts and components	The rule applies to all commercial and non-commercial coating applications to Group I and Group II Vehicles and Equipment and their parts and components at facilities involved in the non-assembly line production, modification, or refinishing of motor vehicles and mobile equipment. Commercial and non-commercial facilities with coating operations considered within the scope of this rule include, but are not limited to: autobody repair/paint shops, production autobody shops, new car dealer repair/paint shops, fleet operator repair/paint shops, custom-made car fabrication facilities, truck body builders, and residences.	The provisions of this rule shall apply to all automobile refinishing operations that include the finishing or refinishing of motor vehicles, mobile equipment and their parts and components.	The provisions of this rule shall apply to all automobile refinishing operations that include the finishing or refinishing of motor vehicles, mobile equipment and their parts and components.	The provisions of this Rule apply to any person who supplies, sells, offers for sale, applies, or specifies the use of coatings for motor vehicles, mobile equipment, and their parts or components.
Comments					

Bakery Ovens

Table I
Identification of Performance Standards
Source Category: Bakery Ovens

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area AQMD Rule 8-42, Large Commercial Bread Bakeries, adopted 9/29/89, amended 6/1/94		San Diego Co. APCD Rule 67.24, Bakery Ovens, adopted 6/7/94, amended and effective 5/15/96		Sacramento Metropolitan AQMD Rule 458, Large Commercial Bread Bakeries, adopted 6/7/94, amended 9/5/96		South Coast AQMD Rule 1153, Commercial Bakery Ovens, adopted 1/4/91, amended 1/13/95		U.S. EPA, Alternative Control Technology for Bakery Oven Emissions (ACT), 12/92	
		Performance Standard									
Control efficiency	VOC		New and modified ovens required to vent all emissions to approved emission control system capable of reducing emissions of precursor organic compounds by 90% on a mass basis. Existing ovens required to vent emissions to a control system that captures all emissions of precursor organic compounds from all oven stacks, and the collected emissions must be vented to an approved emission control device with a destruction efficiency of at least 90% on a mass basis.		No one shall operate a bakery oven subject to this rule unless uncontrolled VOC emissions are reduced by at least 90% by weight. A person may comply with the requirements of this rule by using an air pollution control system which has been installed with an Authority to Construct, includes an emission collection system which ducts exhaust gases from all stacks (except purge stacks, combustion stacks, and comfort hood vents) on all bakery ovens to VOC emission control devices, and has one or		All new and existing ovens shall vent emissions to a control system that has an emissions collection system that captures emissions from all oven stacks, and collected emissions shall be vented to an approved emission control device which has a control efficiency of at least 95% on a mass basis.	x	No person shall operate an existing bakery oven unless VOC emissions are reduced by at least 70% by weight (as carbon) for an oven with base year average daily VOC emissions of 50 pounds or more, but less than 100 pounds (more than 9 and less than 19 tons per year). No person shall operate an existing bakery oven unless VOC emissions are reduced by at least 95% by weight (as carbon) for an oven with base year average daily VOC emissions of 100 pounds or more (19 tons per year). No person shall operate		

Table I
Identification of Performance Standards
Source Category: Bakery Ovens

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area AQMD Rule 8-42, Large Commercial Bread Bakeries, adopted 9/29/89, amended 6/1/94		San Diego Co. APCD Rule 67.24, Bakery Ovens, adopted 6/7/94, amended and effective 5/15/96		Sacramento Metropolitan AQMD Rule 458, Large Commercial Bread Bakeries, adopted 6/7/94, amended 9/5/96		South Coast AQMD Rule 1153, Commercial Bakery Ovens, adopted 1/4/91, amended 1/13/95		U.S. EPA, Alternative Control Technology for Bakery Oven Emissions (ACT), 12/92	
		Performance Standard									
				more VOC emission control devices, each with reduction efficiency of at least 90% by weight.				a new bakery oven unless VOC emissions are reduced by at least 95% by weight (as carbon) if the uncontrolled average daily VOC emissions are 50 pounds or more (9 tons per year).			

Table I
Identification of Performance Standards
Source Category: Bakery Ovens

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area AQMD Rule 8-42, Large Commercial Bread Bakeries, adopted 9/29/89, amended 6/1/94		San Diego Co. APCD Rule 67.24, Bakery Ovens, adopted 6/7/94, amended and effective 5/15/96		Sacramento Metropolitan AQMD Rule 458, Large Commercial Bread Bakeries, adopted 6/7/94, amended 9/5/96		South Coast AQMD Rule 1153, Commercial Bakery Ovens, adopted 1/4/91, amended 1/13/95		U.S. EPA, Alternative Control Technology for Bakery Oven Emissions (ACT), 12/92	
		Performance Standard									
Work practices	VOC	Daily recording of key system operating parameters of air pollution abatement equipment If claiming exemption, must have information available, such as production records, that would allow APCO to verify exemption.	Maintain records needed to determine VOC emissions for all bakery ovens including type of product, yeast percentage, and fermentation time. Maintain annual records based on calendar year production rates, by weight, of each bakery product. Maintain daily records of key system operating parameters of emission control device.	x	Maintain current list of products, baker’s yeast percentage, fermentation time, spike baker’s yeast percentage, and spiking time. Maintain daily records necessary to demonstrate continuous operation of the emissions control device.	If claiming exemption, keep daily record of operations including raw material processed, yeast percentage, fermentation time, and type of product.					

Table I
Identification of Performance Standards
Source Category: Bakery Ovens

Regulated Component	Pollutant	Rule/Measure/Date										
		Bay Area AQMD Rule 8-42, Large Commercial Bread Bakeries, adopted 9/29/89, amended 6/1/94		San Diego Co. APCD Rule 67.24, Bakery Ovens, adopted 6/7/94, amended and effective 5/15/96		Sacramento Metropolitan AQMD Rule 458, Large Commercial Bread Bakeries, adopted 6/7/94, amended 9/5/96		South Coast AQMD Rule 1153, Commercial Bakery Ovens, adopted 1/4/91, amended 1/13/95		U.S. EPA, Alternative Control Technology for Bakery Oven Emissions (ACT), 12/92		
		Performance Standard										
Emissions determination	VOC	BAAQMD Source Test Procedure to measure emissions of organics Oven emissions for specific bakery products for which emission measurements are not available shall be calculated using emission factors in Table I. AIB formula used (see ACT, last column) (Technical Assessment Report, 7/27/90)		Use formula or Table 67.24 to determine VOC emission factors for each bakery product, and determine annual uncontrolled emission rates based on production rate. U.S. EPA formula used (see ACT, last column) (Board letter, 4/19/94). Table 67.24 appears to be based on AIB formula (see ACT). Use U.S. EPA test methods to determine VOC emission factors.		x	Control efficiency of emission control device determined by U.S. EPA methods Calculate VOC mass emission rate and percent control efficiency, both upstream and downstream of the emissions control device, based on respective VOC mass concentration and volumetric flow rate. To determine status for small bakeries exemption, use formula. U.S. EPA formula used (see ACT, last column) (Staff Report, 6/7/94).		Efficiency of emission control system by use of U.S. EPA, ARB, or SCAQMD approved methods. To determine eligibility for exemption low emission rates, use calculation procedures of Attachment A or test methods above. AIB formula used (see ACT, last column) (Staff Report, 11/19/90).		American Institute of Baking (AIB) study (1987) provided mathematical model for predicting ethanol emissions from bakeries, based on baker's percent of yeast and total fermentation time, including a correction for addition of spiking yeast. The formula can be used to estimate ethanol emission factors for each variety of bread. Ethanol emissions from an oven baking breads of those varieties for which the formula is applicable can be quantified by multiplying the product mix by the emission factors. U.S. EPA study (1992)	

Table I
Identification of Performance Standards
Source Category: Bakery Ovens

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
											found that total VOC (rather than just ethanol) emissions, including small quantities of constituents such as acetaldehyde, from bakery ovens can be predicted by a formula based on baker's percent yeast, fermentation time, spike baker's yeast, and spiking time, giving a VOC emission factor. The VOC emission factor is multiplied by the tons per year bread production to give VOC emissions per year. Each variety of bread has a different emission factor.

Table II
Identification of Performance Standards
Source Category: Bakery Ovens

Rule/Measure	Rule/Measure				
	Bay Area AQMD Rule 8-42, Large Commercial Bread Bakeries, adopted 9/20/89, amended 6/1/94	San Diego Co. APCD Rule 67.24, Bakery Ovens, adopted 6/7/94, amended and effective 5/15/96	Sacramento Metropolitan AQMD Rule 458, Large Commercial Bread Bakeries, adopted 6/7/94, amended 9/5/96	South Coast AQMD Rule 1153, Commercial Bakery Ovens, adopted 1/4/91, amended 1/13/95	U.S. EPA, Alternative Control Technology Document for Bakery Oven Emissions, 12/92
Exemptions	Low-emitting ovens that emit less than 150 pounds ethanol per operating day, averaged over 1 year (28 tons per year)	Bakery ovens at stationary sources where combined rated heat input capacity of all bakery ovens is less than 2 million BTU per hour	Small bakeries that emit less than 100 pounds total VOC per day (18 tons per year)	Existing ovens that emit less than 50 pounds uncontrolled VOC per operating day (9 tons per year)	
	Small bakeries with total production of bread, buns, and rolls less than 100,000 pounds per operating day, averaged over all operating days in the month	Bakery ovens at stationary sources where uncontrolled VOC emissions from all bakery ovens combined is less than 50 tons per year			
	Existing ovens operating prior to 1/1/88 that emit less than 250 pounds ethanol per operating day, averaged over a year (46 tons per year)				
	Equipment used exclusively for baking of bakery products other than breads, buns, and rolls (e.g., muffins, croutons, breadsticks, and crackers).				

Table II
Identification of Performance Standards
Source Category: Bakery Ovens

Rule/Measure	Rule/Measure				
	Bay Area AQMD Rule 8-42, Large Commercial Bread Bakeries, adopted 9/20/89, amended 6/1/94	San Diego Co. APCD Rule 67.24, Bakery Ovens, adopted 6/7/94, amended and effective 5/15/96	Sacramento Metropolitan AQMD Rule 458, Large Commercial Bread Bakeries, adopted 6/7/94, amended 9/5/96	South Coast AQMD Rule 1153, Commercial Bakery Ovens, adopted 1/4/91, amended 1/13/95	U.S. EPA, Alternative Control Technology Document for Bakery Oven Emissions, 12/92
Applicability	Bread ovens at large commercial bread bakeries that emit precursor organic compounds	Bakery ovens which emit VOC during baking of yeast-leavened products	Bread ovens at large commercial bread bakeries that emit VOC	Commercial bakery ovens with rated heat input capacity of 2 million BTU per hour or more and with average daily emission of 50 pounds or more of VOC	
Comments	Thermal incineration and catalytic incineration are technically and technologically feasible and cost effective (Technical Assessment Report, 7/27/89)	Catalytic oxidizer most cost-effective (Socioeconomic Impact Assessment, 4/94)	Thermal incineration and catalytic incineration most technically feasible (Staff Report, 6/7/94)	Regenerative thermal oxidation and catalytic oxidation technologically and economically feasible (Staff Report, 11/19/90)	Direct flame thermal oxidation is technically feasible but relatively expensive Regenerative oxidation is feasible Catalytic oxidation is technically and economically feasible

Fugitive Emissions from Chemical Plants

Table I (1 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant						
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.		BAAQMD Regulation 8-Organic Compounds, Rule 22-Valves and flanges at Chemical Plants. 6/1/94.		BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.	
Leak Definitions:		Conc. of total organic compounds, including methane, measured above background, expressed as methane and measured 1 cm or less from leak source; EPA Ref. Method 21 "Method 21".		Conc. of total organic compounds, including methane, measured above background, expressed as methane and measured 1 cm or less from leak source; EPA Ref. Method 21 "Method 21".		Conc. of total organic compounds, including methane, measured above background, expressed as methane and measured 1 cm or less from leak source; EPA Ref. Method 21 "Method 21".	
Major Gas Leak Definitions:		>100 ppm (valves, connectors) >500 ppm (pumps & compressors, pressure relief devices)		> 10,000 ppm		> 10,000 ppm	
Minor Gas Leak Definitions:		Same as Major		> 10,000 ppm		> 10,000 ppm	
Major Liquid Leak Definitions:		Dripping of total organic compounds (TOC) at rate > 3 drops/min. and a conc. of TOC > applicable leak standard (gas leak definitions)					

Table I (1 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant						
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.		BAAQMD Regulation 8-Organic Compounds, Rule 22-Valves and flanges at Chemical Plants. 6/1/94.		BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.	
Minor Liquid Leak Definitions:		Same as major					
A. Leak Control Requirements	VOC						
A1. <u>Gas leaks allowed (<200 components):</u> - Valves (V) - Pumps seals (P) - Compressors seals (Cp) - Pressure Relief Valves (PRV) - Hatches - Open ended lines (OEL) - Other components		N/A		N/A		N/A	

Table I (1 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant											
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.		BAAQMD Regulation 8-Organic Compounds, Rule 22-Valves and flanges at Chemical Plants. 6/1/94.		BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.						
A2. <u>Gas leaks allowed (>200 components):</u> - Valves (V) - Pumps seals (P) - Compressors seals (Cp) - Pressure Relief Valves (PRV) - Hatches - Open ended lines (OEL) - Other components			N/A			N/A				N/A		
B. Components ID	VOC			Yes		Yes		Yes				
B1. <u>All components physically identified:</u>				- not specified		- not specified		- not specified				
B2. <u>Components identified on flow diagrams:</u>				- No		- No		- No				

Table I (1 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant								
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.		BAAQMD Regulation 8-Organic Compounds, Rule 22-Valves and flanges at Chemical Plants. 6/1/94.		BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.			
C. Operators Inspection Requirements									
<u>C1. Audio-visual insp.</u>			- Daily (pumps & compressors). If leak observed, determine VOC concentration.		- None		- None specified.		
<u>C2. Hydrocarbon analyzer Monitoring (Method 21) - Accessible components:</u>			- Quarterly (valves, pressure relief devices, pumps & compressors)		- Quarterly (valves) - None specified for flanges		- Quarterly		
<u>C2. Hydrocarbon analyzer Monitoring (Method 21) - Threaded Connections & Flanges:</u>			- <u>For connectors opened during a turnaround</u> , inspect within 90 days after start-up is completed.		- None specified		N/A		

Table I (1 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant						
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.		BAAQMD Regulation 8-Organic Compounds, Rule 22-Valves and flanges at Chemical Plants. 6/1/94.		BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.	
<u>C2. Hydrocarbon analyzer Monitoring (Method 21) - Inaccessible components:</u>		- Yearly (valves, pressure relief devices) (Note: PRDs equipped with weep hole shall be inspected quarterly at outlet of weep hole if horn outlet is inaccessible.)		- Yearly (valves only)		- None specified	
<u>C2. Hydrocarbon analyzer Monitoring (Method 21) - Unsafe to monitor components:</u>		- Nothing specified		- Nothing specified		- Nothing specified	
<u>C2. Hydrocarbon analyzer Monitoring (Method 21) - PRV after a pressure relief:</u>		- 5 working days		- N/A		- Nothing specified	
<u>C2. Hydrocarbon analyzer Monitoring (Method 21) - Monitoring frequency extended for good performance:</u>		- Annually (valves) if: 1) leak free for 5 consecutive quarters; 2) approval from APCO.		- Nothing specified		- Nothing specified	

Table I (1 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant						
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.		BAAQMD Regulation 8-Organic Compounds, Rule 22-Valves and flanges at Chemical Plants. 6/1/94.		BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.	
<u>C3. Tag all leaks detected.</u>			Yes - use brightly colored weatherproof tags showing date of leak detection.		Yes - tag leaking valves		Yes - use brightly colored weatherproof tags showing date of leak detection.
D. Maintenance Requirements							
<u>D1. Non-Essential Components - Repair Gas Leaks Within:</u>			<u>Valves, Connectors, Pumps & Compressors:</u> - minimize within 24 hours. - repair within 7 days, 24 hours if discovered by APCO. <u>Pressure Relief Devices:</u> - minimize within 24 hours. - repair within 15 days, 7 days if discovered by APCO.		- repair within 15 days.		- repair within 15 days.

Table I (1 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant								
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.		BAAQMD Regulation 8-Organic Compounds, Rule 22-Valves and flanges at Chemical Plants. 6/1/94.		BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.			
<u>D1. Non-Essential Components - Repair Gas Leaks > 50,000 ppmv Within:</u>				<u>Leaks > 75,000 ppm:</u> - repair within 15 days.					
<u>D1. Non-Essential Components - Repair Major Liquid Leaks Within:</u>			- minimize within 24 hours and repair within 7 days.						
<u>D1. Non-Essential Components - Repair Minor Liquid Leaks Within:</u>			- minimize within 24 hours and repair within 7 days.						

Table I (1 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant					
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.	BAAQMD Regulation 8-Organic Compounds, Rule 22-Valves and flanges at Chemical Plants. 6/1/94.	BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.		
D2. Essential Components - <u>Minimized Leaks Within:</u>		<p>- Within 24 hours.</p> <p><u>For Non-Repairable Valves:</u></p> <p>1) repair or replace within 5 years or at next scheduled turnaround, whichever first.</p> <p>2) number awaiting repair not to exceed: 0.5% (valves) or 1% (pressure relief devices, pumps & compressors) of total number of non-repairable equipment allowed or 1 piece of equipment.</p> <p><u>Alternative to 2):</u></p> <p>- measure for mass emissions within 7 days after leak discovered. Mass emission measurement must be less than: 0.1 lb/day (valves), 0.2 lb/day (PRDs, P & C).</p> <p>- facility total number awaiting repair not to exceed: 1% (valves), 5% (PRDs, P & C)</p> <p>- If any component measurement is > 15 lb/day TOC, repair within 7 days.</p> <p>(Note: This implies that</p>	<p>- minimize within 15 days.</p> <p>- if still exceeded 10,000 ppm, repair at next scheduled turnaround but not longer than 6 months.</p>	<p>- minimize within 15 days and repair at next scheduled turnaround.</p>		

Table I (1 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant						
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.		BAAQMD Regulation 8-Organic Compounds, Rule 22-Valves and flanges at Chemical Plants. 6/1/94.		BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.	
			anything between 15 lb/day and the mass emission standards above must use method 2).)				
<u>D2. Chronic Leakers:</u>							
<u>D2. OEL and V Located at End of Lines:</u>							
<u>D2. Hatches:</u>							
<u>D3. Components inspected after repair or replacement with Method 21:</u>			- Within 24 hours		- Within 3 months for valves. Nothing specified for flanges.		- None specified.
<u>D4. Operator management plan:</u>			N/A		N/A		N/A

Table I (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant	Rule/Measure/Date								
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		VCAPCD Rule 74.7. Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries & Chemical Plants. 10/10/95. (Similar to RACT except as noted)				
		Performance Standard								
Leak Definitions:			Conc. of total <u>gaseous</u> hydrocarbons, including methane, measured above background, expressed as methane and measured at interface of leak source; EPA Reference Method 21 "Method 21".		Conc. of <u>gaseous</u> volatile organic compound, measured above background, expressed as methane and measured 1 cm or less from leak source; EPA Reference Method 21 "Method 21".					
Major Gas Leak Definitions:			> 10,000 ppmv		>10,000 ppmv (except PRD)					
Minor Gas Leak Definitions:			>1,000 ppmv but ≤10,000 ppmv		>1,000 ppmv but ≤10,000 ppmv (except PRD)					
Pressure Relief Device Gas Leak Definitions:					>200 ppm					

Table I (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		VCAPCD Rule 74.7. Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries & Chemical Plants. 10/10/95. (Similar to RACT except as noted)					
		Performance Standard									
Major Liquid Leak Definitions:			visible mist or continuous flow of liquid.		dripping of liquid volatile organic compounds at rate of more than 3 drops per minute.						
Minor Liquid Leak Definitions:			Not a major leak and drips liquid at a rate of more than 3 drops per minute.		dripping of liquid volatile organic compounds at rate of more than 3 drops per minute.						

Table I (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant	Rule/Measure/Date								
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		VCAPCD Rule 74.7. Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries & Chemical Plants. 10/10/95. (Similar to RACT except as noted)				
		Performance Standard								
A. Leak Control Requirements	VOC				- Any liquid leak or gas leak > 50,000 ppm detected by District inspection constitute a violation. - Any major gas leak detected by District inspection, within any continuous 24-hour period, and numbering in excess of number of leaks allowed, constitute a violation.					

Table I (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		VCAPCD Rule 74.7. Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries & Chemical Plants. 10/10/95. (Similar to RACT except as noted)					
		Performance Standard									
A1. <u>Gas leaks allowed (<200 components):</u> - Valves (V) - Pumps seals (P) - Compressors seals (Cp) - Pressure Relief Valves (PRV) - Hatches - Open ended lines (OEL) - Other components		N/A			1 2 1 1						
					1						

Table I (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		VCAPCD Rule 74.7. Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries & Chemical Plants. 10/10/95. (Similar to RACT except as noted)					
		Performance Standard									
A2. <u>Gas leaks allowed (>200 components):</u> - Valves (V) - Pumps seals (P) - Compressors seals (Cp) - Pressure Relief Valves (PRV) - Hatches - Open ended lines (OEL) - Other components		N/A		0.5% of # inspected. 1% of # inspected. 1 1							
				1							
B. Components ID	VOC										

Table I (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		VCAPCD Rule 74.7. Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries & Chemical Plants. 10/10/95. (Similar to RACT except as noted)					
		Performance Standard									
<u>B1. All components physically identified:</u>			- major, critical		- major components						
<u>B2. Components identified on flow diagrams:</u>			- major, critical, & inaccessible except C & F.		- minor components						
C. Operators Inspection Requirements											

Table I (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant	Rule/Measure/Date							
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		VCAPCD Rule 74.7. Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries & Chemical Plants. 10/10/95. (Similar to RACT except as noted)			
		Performance Standard							
C1. Audio-visual insp. (RACT defn. of leak: any liquid leak, a visible or audible leak, the presence of bubbles using soap solns., or a leak identified by use of a vapor analyzer.) (Note: If vapor leak identified, measured leak according to Method 21.)		- Every 8 hrs (P, Cp, PRV) - Daily (P, Cp, PRV, & PRSB at manned oil & gas production fields and pipeline transfer stations) - Weekly (unmanned facilities)		- Every 8 hrs (accessible P, Cp, PRV except for unmanned oil & gas production fields and unmanned pipeline transfer stations)					

Table I (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		VCAPCD Rule 74.7. Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries & Chemical Plants. 10/10/95. (Similar to RACT except as noted)					
		Performance Standard									
C2. Hydrocarbon analyzer Monitoring (Method 21) - Accessible components:			- Quarterly except Threaded Connections & Flanges		- Quarterly		- Monthly				
C2. Hydrocarbon analyzer Monitoring (Method 21) - Threaded Connections & Flanges:			- Immediately after being installed and semi-annually thereafter				- New, replaced or repaired fittings, including flanges & threaded connections shall be monitored immediately after being placed into service or w/in 30 days if necessary due to instrumentation design.				
C2. Hydrocarbon analyzer Monitoring (Method 21) - Inaccessible components:			- Yearly		- Yearly						

Table I (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		VCAPCD Rule 74.7. Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries & Chemical Plants. 10/10/95. (Similar to RACT except as noted)					
		Performance Standard									
C2. Hydrocarbon analyzer Monitoring (Method 21) - unsafe to monitor components:			- Inspection plan approved by EO								
C2. Hydrocarbon analyzer Monitoring (Method 21) - PRV after a pressure relief:			- W/in 3 days		- W/in 14 days						

Table I (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant	Rule/Measure/Date							
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.	VCAPCD Rule 74.7. Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries & Chemical Plants. 10/10/95. (Similar to RACT except as noted)					
		Performance Standard							
C2. Hydrocarbon analyzer Monitoring (Method 21) - Monitoring frequency extended for good performance:		- Yearly (all components except P, Cp, PRV, & PRSB at facility if <u>no liquid leaks and no major gas leaks > 0.5%</u> of total components inspected per inspection period for 12 consecutive months.) (Note: Leaks from PRSBs are not included in total count of leaking components in the 0.5% determination.)		- Yearly (all components except P, Cp at facility if <u>no liquid leaks and no major gas leaks > 0.5%</u> of total components inspected per inspection period for 5 consecutive quarters)		- Quarterly (except flanges & threaded connections - yearly) if no major gas leak or any major liquid leak for 3 consecutive monthly inspections.			

Table I (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		VCAPCD Rule 74.7. Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries & Chemical Plants. 10/10/95. (Similar to RACT except as noted)					
		Performance Standard									
<u>C3. Tag all leaks detected.</u>			Yes - use brightly colored weatherproof tags showing date of leak detection, tag not to be removed until component is repaired and reinspected.		- None specified						
D. Maintenance Requirements											
<u>D1. Non-essential Components - Repair Gas Leaks within:</u>			- 14 days (minor) - 5 days (major)		- 14 days (minor) - 5 days (major)						

Table I (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		VCAPCD Rule 74.7. Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries & Chemical Plants. 10/10/95. (Similar to RACT except as noted)					
		Performance Standard									
<u>D1. Non-essential Components - Repair Gas Leaks > 50,000 ppmv within:</u>			- 1 day** (onshore) - 2 days (o/g production or pipeline transfer stations) - 5 days (offshore) (**Note: unless prohibited by Cal OSHA standards or 29 CFR 1910)		- 1 day						

Table I (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant	Rule/Measure/Date							
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		VCAPCD Rule 74.7. Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries & Chemical Plants. 10/10/95. (Similar to RACT except as noted)			
		Performance Standard							
<u>D1. Non-essential Components - Repair Major Liquid Leaks Within:</u>		- 1 day** (onshore) - 2 days (o/g production or pipeline transfer stations) - 5 days (offshore) (**Note: unless prohibited by Cal OSHA standards or 29 CFR 1910)	- 1 day						
<u>D1. Non-essential Components - Repair Minor Liquid Leaks Within:</u>		- 2 days** (onshore) - 5 days (offshore) (**Note: unless prohibited by Cal OSHA standards or 29 CFR 1910)	- 1 day						

Table I (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant	Rule/Measure/Date							
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.	VCAPCD Rule 74.7. Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries & Chemical Plants. 10/10/95. (Similar to RACT except as noted)					
		Performance Standard							
D2. Essential Components - Minimized Leaks within:		- Immediately - <i>Critical & unsafe to monitor components:</i> minimized immediately and replaced w/ BACT during shutdown or w/in 12 months, whichever occurs first.	- not specified						

Table I (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant	Rule/Measure/Date								
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		VCAPCD Rule 74.7. Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries & Chemical Plants. 10/10/95. (Similar to RACT except as noted)				
		Performance Standard								
D2. Chronic Leakers:			- <i>Components with 5 repair actions for major gas or liquid leak within 12 months;</i> replaced with BACT.		- <i>Components with 5 repair actions for a liquid leak or a major gas leak within a continuous 12 months period;</i> replaced with BACT or BART, or vent to an approvable air pollution control device.					

Table I (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant	Rule/Measure/Date							
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.	VCAPCD Rule 74.7. Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries & Chemical Plants. 10/10/95. (Similar to RACT except as noted)					
		Performance Standard							
D2. OEL and V Located at End of Lines:		- Sealed with a blind flange, plug, cap, or a second closed valve except during operations. (Note: Operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs.)							

Table I (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		VCAPCD Rule 74.7. Fugitive Emissions of Reactive Organic Compounds (ROC) at Petroleum Refineries & Chemical Plants. 10/10/95. (Similar to RACT except as noted)					
		Performance Standard									
D2. Hatches:			- Keep closed except during sampling, adding process matl., or attended maintenance operations.								
D3. Components inspected after repair or replacement with Method 21:			- Within 30 days		- Within 30 days						
D4. Operator management plan:			N/A		N/A						

Table II (1 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Rule/Measure				
	BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.	BAAQMD Regulation 8-Organic Compounds, Rule 22-Valves and flanges at Chemical Plants. 6/1/94.	BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refinery and Chemical Plants, Bulk Plants and Bulk Terminals. 6/1/94	
Exemptions	<u>Visual Inspection Exemption:</u> - not apply to days when facility not staffed. <u>Inspection, Identification Exemption:</u> - equipment handling organic liquids having initial boiling point > 150 °C (302 °F)		<u>Leak/Repair Standards Exemption:</u> - any pressure relief valve on storage tanks. - the static upstream pressure exceeds the setpoint of the pressure relief valve.	
	<u>Inspection, Identification and Record Keeping Exemption:</u> - research and development plants which produce only non-commercial products solely for research and dev. purposes. - equipment in vacuum service.		<u>Leak/Repair Standards and Inspection Exemption:</u> - emissions from the pressure relief valve is vented to a vapor recovery or disposal system that is at least 95% efficient. - the pressure relief valve is protected by a rupture disk.	

Table II (1 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Rule/Measure				
	BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.	BAAQMD Regulation 8-Organic Compounds, Rule 22-Valves and flanges at Chemical Plants. 6/1/94.	BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refinery and Chemical Plants, Bulk Plants and Bulk Terminals. 6/1/94	
	<p><u>Rule Exemption:</u></p> <ul style="list-style-type: none"> - Controlled seal systems and pressure relief devices vented to vapor recovery or disposal system which reduces emissions of organic compounds from the equipment by 95% or greater (exemption from rule except for provision on the determination of control efficiency). - Small facilities-facilities which have less than 100 valves or less than 10 pumps and compressors (these facilities are subjects to Regulation 8-22). - Bulk plant and terminal loading racks-connections at the interface between loading rack and the vehicle being loaded. - Storage tanks-appurtenances on storage tanks including pressure relief devices, which are subject to Regulation 8, Rule 5 Storage of Organic Liquids. 	<p><u>Rule Exemption:</u></p> <ul style="list-style-type: none"> - Low vapor pressure-valves or flanges which handle only organic liquids with a vapor pressure less than 2.6 mmHg (0.05 psia) at 20 oC (68 oF) or exhibit a 10% evaporation point > 150 oC (302 oF) when using ASTM D-86. - Natural gas-valves or flanges handling only commercial natural gas. - Research and development facilities which produce only non-commercial products for research and dev. purposes. - Large facility-valves or flanges in chemical plants having 100 or more valves, which are subject to Reg. 8, Rule 18-Valves and connectors at Petroleum Refineries, Chemical Plants, Bulk Plants and Bulk Terminals. 	<p><u>Rule Exemption:</u></p> <ul style="list-style-type: none"> - pressure relief valves handling only organic liquids with a vapor pressure less than 2.6 mmHg (0.05 psia) at 20 oC (68 oF) or exhibit a 10% evaporation point greater than 150 oC (302 oF) according to appropriate test method. - research or development facilities which produce only non-commercial products for research and development purposes. 	

Table II (1 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Rule/Measure				
	BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.	BAAQMD Regulation 8-Organic Compounds, Rule 22-Valves and flanges at Chemical Plants. 6/1/94.	BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refinery and Chemical Plants, Bulk Plants and Bulk Terminals. 6/1/94	
Applicability	Leaking equipment at petroleum refineries, chemical plants, bulk plants and bulk terminals including but not limited to: valves, connectors, pumps, compressors, pressure relief devices, diaphragms, hatches, sight-glasses, fittings, sampling ports, meters, pipes & vessels.	Valves and flanges at chemical plants that has less than 100 valves.	Pressure relief valves on any equipment handling organic compounds at petroleum refineries and chemical plants.	
Comments	<u>Note:</u> Rule 18 - Valves and Connectors at Petroleum Refinery complexes, chemical Plants, Bulk Plants and Bulk Terminals and Rule 25 - Pump and Compressor Seals at Petroleum Refinery, Chemical Plants, Bulk Plants and Bulk Terminals has been consolidated and renamed: Rule 18 - Equipment Leaks, 1/7/98.			

Table II (1 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Rule/Measure				
	BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.	BAAQMD Regulation 8-Organic Compounds, Rule 22-Valves and flanges at Chemical Plants. 6/1/94.	BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refinery and Chemical Plants, Bulk Plants and Bulk Terminals. 6/1/94	
	<u>Definition:</u> - Petroleum Refinery: Any facility that processes petroleum products as defined in Standard Industrial classification Manual as Industry No. 2911, Petroleum Refining. - Chemical Plants:	<u>Definition:</u> - Chemical Plants: Any facility engaged in producing organic or inorganic and/or manufacturing products by chemical processes. Any facility or operation that has 28 as first digits in their Standard Industrial Classification (SIC) Code as det. from the SIC Manual. May include, but not limited to the manufacture of: industrial inorganic and organic chemicals; plastic and synthetic resins, synthetic rubber, synthetic and other man made fibers; drugs; soap, detergents and cleaning preparations, perfumes, cosmetics and other toilet preparations; paints, varnishes, lacquers, enamels and allied products; agricultural chemicals; safflower and sunflower oil extracts; re-refining.	<u>Definition:</u> - Chemical Plant: - Rupture Disc: The thin metal diaphragm held between flanges. - Background: - Inaccessible Pressure Relief Valve:	

Table II (1 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Rule/Measure				
	BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.	BAAQMD Regulation 8-Organic Compounds, Rule 22-Valves and flanges at Chemical Plants. 6/1/94.	BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refinery and Chemical Plants, Bulk Plants and Bulk Terminals. 6/1/94	
		<u>Definition con't:</u> - Inaccessible: not in an accessible location as defined by Title 8, Section 33207, General Industrial Safety Orders of CAL OSHA 1986. - Small Chemical Plant: any plant that has less than 100 valves.		

Table II (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Rule/Measure	Rule/Measure				
	RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.			
Exemptions	<u>Visual Inspection Exemption:</u> - PRV, P & Cp equipped with closed-vent system capable of capturing and transporting any leak to vapor control system.				

Table II (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Rule/Measure	Rule/Measure				
	RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.			
	<u>Inspection Exemption:</u> - Components exclusively handling commercial natural gas. - Components buried below ground. - Components, except those at gas processing plants, exclusively handling fluids with a VOC concentration of 10% by wt. or less, as determined by appropriate test methods; or components exclusively handling liquid, if the wt% evaporated is 10% or less at 150 °C (302 °F), as determined by appropriate test methods. - **Components at oil and gas production facilities, or pipeline transfer stations, handling liquid of less than or equal to 20° API gravity after point of primary separation.				

Table II (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Rule/Measure	Rule/Measure				
	RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.			
	<u>Inspection Exemption con't.:</u> - **Components at oil and gas production facilities, or pipeline transfer stations, handling liquid between 20 and 30° API gravity which are located either: 1)downstream of a wellhead equipped with a casing vapor recovery system, provided that the vapor recovery is at a pressure of less than 10 psig; or 2)after the point of primary separation of oil and gas, provided the separation vessel is equipped with a vapor recovery system and is operated at a pressure less than 25 psig.				

Table II (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Rule/Measure	Rule/Measure				
	RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.			
	<u>Inspection Exemption con't.:</u> (**Note: (1)Components located at <u>offshore oil platforms</u> shall be visually inspected on a quarterly basis. If leak detected, measure according to Method 21. Quarterly visual inspection may be changed to annual, except P, Cp, PRV, & PRSB, if no liquid leaks and no major gas leaks > 0.5% of total components inspected per inspection period for 12 consecutive months. Leaks from PRSB not included in total count of leaking components. (2)Components located at <u>onshore facilities</u> shall either be subject to (1) or that any leak, from components not subject to an inspection program that are detected by the District, may constitute a violation.)				

Table II (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Rule/Measure	Rule/Measure				
	RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.			
	<u>Rule Exemption:</u> - one-half inch and smaller fittings which have been demonstrated to the APCO to be leak-free based on an initial inspection in accordance with Method 21.	<u>Rule Exemption:</u>			
Applicability	Components including but not limited to valves (V), flanges (F), fittings (C), pumps (P), compressors (Cp), pressure relief devices (PRV), diaphragms, hatches, sight-glasses, and meters at refineries, chemical plants, oil & gas processing plants including offshore platforms, and pipeline transfer stations.	Valves, fittings, pumps, compressors, pressure relief devices, diaphragms, hatches, sight-glasses, and meters at refineries, chemical plants, oil and gas production fields, natural gas processing plants, and pipeline transfer stations.			

Table II (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Rule/Measure	Rule/Measure				
	RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.			
Comments	<u>Comp. classifications:</u> - Major: ≥ 4 " V, ≥ 5 -hp P, any Cp, and ≥ 4 " PRV. - Minor: not a major. - Critical: require unit shutdown if component taken out of service. - Inaccessible: $>15'$ above ground when access required from ground; $>6'$ away from platform when access required from platform. - Unsafe: as defined by OSHA standards or in provisions for worker safety found in 29 CFR 1910.				

Table II (2 of 2)
Identification of Performance Standards
Source Category: Fugitive Emissions from Chemical Plants

Rule/Measure	Rule/Measure				
	RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.			
	<u>Definitions:</u> - Unmanned Facility: remote facility which has no permanent sited personnel and is greater than 5 miles from the closest manned facility.				

Fugitive Emissions from Oil and Gas Production

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Regulated Component	Pollutant	Rule/Measure/Date							
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil Production Facilities. 10/17/90		SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)	
		Performance Standard							
Leak Definitions:		X	Conc. of total <u>gaseous</u> hydrocarbons, including methane, measured above background, expressed as methane and measured at interface of leak source; EPA Reference Method 21 "Method 21".	X	Conc. of <u>gaseous</u> volatile organic compound, measured above background, expressed as methane and measured 1 cm or less from leak source; EPA Reference Method 21 "Method 21".		Conc. of total organic compounds, including methane, measured above background, expressed as methane and measured 1 cm or less from leak source; EPA Ref. Method 21 "Method 21".		
Major Gas Leak Definitions:			> 10,000 ppmv	X	> 10,000 ppmv (except PRD)		> 10,000 ppm		
Minor Gas Leak Definitions:			> 1,000 ppmv but ≤ 10,000 ppmv	X	> 1,000 ppmv but ≤ 10,000 ppmv (except PRD)		> 10,000 ppm		
Pressure Relief Device Gas Leak Definitions:				X	> 200 ppm				

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil Production Facilities. 10/17/90		SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)			
		Performance Standard									
Major Liquid Leak Definitions:		X	visible mist or continuous flow of liquid.		dripping of liquid volatile organic compounds at rate of more than 3 drops per minute.		dripping of total organic compounds (TOC) at rate > 3 drops/min.		visible mist or dripping of liquid at rate > 3 drops/min.		
Minor Liquid Leak Definitions:		X	Not a major leak and drips liquid at a rate of more than 3 drops per minute.		dripping of liquid volatile organic compounds at rate of more than 3 drops per minute.		dripping of total organic compounds (TOC) at rate > 3 drops/min.		visible mist or dripping of liquid at rate > 3 drops/min.		

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Regulated Component	Pollutant	Rule/Measure/Date								
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil Production Facilities. 10/17/90		SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)		
		Performance Standard								
A. Leak Control Requirements	VOC			X	- Any liquid leak or gas leak > 50,000 ppm detected by District inspection constitute a violation. - Any major gas leak detected by District inspection, within any continuous 24-hour period, and numbering in excess of number of leaks allowed, constitute a violation.			No facility shall exceed # of leaks allowed for each inspection period for major gas leaks and/or liquid leaks, as determined by District or operator inspection, except for unforeseen failure or malfunction (Rule 505).		

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil Production Facilities. 10/17/90		SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)			
		Performance Standard									
A1. <u>Gas leaks allowed (<200 components):</u> - Valves (V) - Pumps seals (P) - Compressors seals (Cp) - Pressure Relief Valves (PRV) - Hatches - Open ended lines (OEL) - Other components		N/A		X	1 2 1 1 1		N/A		1 2 1 1 1		

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Regulated Component	Pollutant	Rule/Measure/Date											
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil Production Facilities. 10/17/90		SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)					
		Performance Standard											
A2. <u>Gas leaks allowed (>200 components):</u> - Valves (V) - Pumps seals (P) - Compressors seals (Cp) - Pressure Relief Valves (PRV) - Hatches - Open ended lines (OEL) - Other components			N/A			0.5% of # inspected. 1% of # inspected. 1 1		N/A			0.5% of # inspected. 1% of # inspected. 1 1		
B. Components ID	VOC				X			Not specified					
B1. <u>All components physically identified:</u>		X	- major, critical			- major components		Not specified					

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Regulated Component	Pollutant	Rule/Measure/Date											
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil Production Facilities. 10/17/90		SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)					
		Performance Standard											
B2. <u>Components identified on flow diagrams:</u>		X	- major, critical, & inaccessible except C & F.		- minor components		Not specified						
C. Operators Inspection Requirements													
C1. <u>Audio-visual insp. (RACT defn. of leak:</u> any liquid leak, a visible or audible leak, the presence of bubbles using soap solns., or a leak identified by use of a vapor analyzer.) (Note: If vapor leak identified, measured leak according to Method 21.)		X	- Every 8 hrs (P, Cp, PRV) - Daily (P, Cp, PRV, & PRSB at manned oil & gas production fields and pipeline transfer stations) - Weekly (unmanned facilities)		- Every 8 hrs (accessible P, Cp, PRV except for unmanned oil & gas production fields and unmanned pipeline transfer stations)		- Weekly (P, Cp)						

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil Production Facilities. 10/17/90		SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)			
		Performance Standard									
C2. Hydrocarbon analyzer Monitoring (Method 21) - Accessible components:		X	- Quarterly except Threaded Connections & Flanges		- Quarterly		- None specified				
C2. Hydrocarbon analyzer Monitoring (Method 21) - Threaded Connections & Flanges:		X	- Immediately after being installed and semi-annually thereafter				- None specified				

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Regulated Component	Pollutant	Rule/Measure/Date							
			RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil Production Facilities. 10/17/90		SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)
		Performance Standard							
<u>C2. Hydrocarbon analyzer Monitoring (Method 21) - Inaccessible components:</u>		X	- Yearly		- Yearly		- None specified		
<u>C2. Hydrocarbon Analyzer Monitoring (Method 21) - Unsafe to monitor components:</u>		X	- Inspection plan approved by EO				- None specified		
<u>C2. Hydrocarbon Analyzer Monitoring (Method 21) - PRV after a pressure relief:</u>		X	- W/in 3 days		- W/in 14 days		- None specified		

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Regulated Component	Pollutant	Rule/Measure/Date										
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil Production Facilities. 10/17/90		SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)				
		Performance Standard										
C2. Hydrocarbon Analyzer Monitoring (Method 21) - Monitoring frequency extended for good performance:		X	- Yearly (all components except P, Cp, PRV, & PRSB at facility if <u>no liquid leaks and no major gas leaks > 0.5%</u> of total components inspected per inspection period for 12 consecutive months.) (Note: Leaks from PRSBs are not included in total count of leaking components in the 0.5% determination.)		- Yearly (all components except P, Cp at facility if <u>no liquid leaks and no major gas leaks > 0.5%</u> of total components inspected per inspection period for 5 consecutive quarters)		- None specified					

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Regulated Component	Pollutant	Rule/Measure/Date								
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil Production Facilities. 10/17/90		SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)		
		Performance Standard								
C3. Tag all leaks detected.		X	Yes - use brightly colored weatherproof tags showing date of leak detection, tag not to be removed until component is repaired and reinspected.		- None specified		- Yes			
D. Maintenance Requirements										

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Regulated Component	Pollutant	Rule/Measure/Date					
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.	BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil Production Facilities. 10/17/90	SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)		
		Performance Standard					
D1. Non-Essential Components - Repair Gas Leaks Within:		X	- 14 days (minor) - 5 days (major)	- 14 days (minor) - 5 days (major)	<u>Valves, Flanges, Chokes & Components</u> (See Comments-defn. on worksheet 1-B): - 24 hours. <u>Pumps and Compressors:</u> - within 24 hours. If spare also exceeded, repair either one within 30 days; the other may be operated until repairs completed.	- 14 days (minor) - 5 days (major)	

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Regulated Component	Pollutant	Rule/Measure/Date							
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil Production Facilities. 10/17/90		SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)	
		Performance Standard							
D1. Non-Essential Components - Repair Gas Leaks > 50,000 ppmv Within:		X	- 1 day** (onshore) - 2 days (o/g production or pipeline transfer stations) - 5 days (offshore) (**Note: unless prohibited by Cal OSHA standards or 29 CFR 1910)	- 1 day			- 1 day** or removed from service until successfully repaired (onshore) - 2 days** or removed from service until successfully repaired (offshore) (**Note: unless prohibited by Cal OSHA standards or 29 CFR 1910)		

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil Production Facilities. 10/17/90		SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)			
		Performance Standard									
<u>D1. Non-Essential Components - Repair Major Liquid Leaks Within:</u>		X	- 1 day** (onshore) - 2 days (o/g production or pipeline transfer stations) - 5 days (offshore) (**Note: unless prohibited by Cal OSHA standards or 29 CFR 1910)		- 1 day		- within 24 hours. If repair not successful, replace within 15 days <u>(apply to all components)</u> .		- 24 hours		
<u>D1. Non-Essential Components - Repair Minor Liquid Leaks Within:</u>		X	- 2 day** (onshore) - 5 days (offshore) (**Note: unless prohibited by Cal OSHA standards or 29 CFR 1910)		- 1 day		- repair within 24 hours. If repair not successful, replace within 15 days <u>(apply to all components)</u> .		- 24 hours		

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil Production Facilities. 10/17/90		SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)			
		Performance Standard									
D2. Essential Components - Minimized Leaks Within:		X	- Immediately - <u>Critical & unsafe to monitor components:</u> minimized and replaced w/ BACT during shutdown or w/in 12 months, whichever occurs first.		- not specified		<u>Valves, Flanges, Chokes & Components</u> <u>(See Comments-defn. on worksheet 1-B):</u> - within 24 hours. If still exceeds 10,000 ppm, repair at next scheduled turnaround but not longer than 3 months. <u>Packed Seal Pumps and Compressors</u> - within 24 hours. If still exceeds 10,000 ppm, repair at next scheduled maintenance of the well head or within 3 months.				

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Regulated Component	Pollutant	Rule/Measure/Date						
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.	BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil Production Facilities. 10/17/90	SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91.	(Note: Similar to or less stringent than RACT except as noted)		
		Performance Standard						
D2. Chronic Leakers:		- <u>Components with 5 repair actions for major gas or liquid leak within 12 months</u> ; replaced with BACT.	- <u>Components with 5 repair actions for a liquid leak or a major gas leak within a continuous 12 months period</u> ; replaced with BACT or BART, or vent to an approvable air pollution control device.					

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil Production Facilities. 10/17/90		SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)			
		Performance Standard									
<u>D2. OEL and V Located at End of Lines:</u>		- Sealed with a blind flange, plug, cap, or a second closed valve except during operations. (Note: Operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs.)									

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Regulated Component	Pollutant	Rule/Measure/Date									
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil Production Facilities. 10/17/90		SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)			
		Performance Standard									
<u>D2. Hatches::</u>			- Keep closed except during sampling, adding process matl., or attended maintenance operations.				- Keep all access hatches closed except during active maintenance or repairs. - No open liquid pools of crude oil or condensate in the lease area. - No open or uncovered vessels of crude material larger than 250ml kept in lease area. Keep well cellar covered.				
<u>D3. Components inspected after repair or replacement with Method 21:</u>			- Within 30 days		- Within 30 days		- Within one week.				

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Regulated Component	Pollutant	Rule/Measure/Date										
		RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.		SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.		BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil Production Facilities. 10/17/90		SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)				
		Performance Standard										
D4. Operator management plan:			N/A			N/A			N/A			

Table II
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Rule/Measure	Rule/Measure				
	RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.	BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil production Facilities. 10/17/90.	SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)	
Exemptions	<u>Visual Inspection Exemption:</u> - PRV, P & Cp equipped with closed-vent system capable of capturing and transporting any leak to vapor control system.				

Table II
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Rule/Measure	Rule/Measure				
	RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.	BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil production Facilities. 10/17/90.	SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)	
	<u>Inspection Exemption:</u> - Components exclusively handling commercial natural gas. - Components buried below ground. - Components, except those at gas processing plants, exclusively handling fluids with a VOC concentration of 10% by wt. or less, as determined by appropriate test methods; or components exclusively handling liquid, if the wt% evaporated is 10% or less at 150 °C (302 °F), as determined by appropriate test methods. - **Components at oil and gas production facilities, or pipeline transfer stations, handling liquid of less than or equal to 20° API gravity after point of primary separation.				

Table II
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Rule/Measure	Rule/Measure				
	RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.	BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil production Facilities. 10/17/90.	SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)	
	<u>Inspection Exemption con't.:</u> - **Components at oil and gas production facilities, or pipeline transfer stations, handling liquid between 20 and 30° API gravity which are located either: 1)downstream of a wellhead equipped with a casing vapor recovery system, provided that the vapor recovery is at a pressure of less than 10 psig; or 2)after the point of primary separation of oil and gas, provided the separation vessel is equipped with a vapor recovery system and is operated at a pressure less than 25 psig.				

Table II
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Rule/Measure	Rule/Measure				
	RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.	BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil production Facilities. 10/17/90.	SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)	
	<u>Inspection Exemption con't.:</u> (**Note: (1)Components located at <u>offshore oil platforms</u> shall be visually inspected on a quarterly basis. If leak detected, measure according to Method 21. Quarterly visual inspection may be changed to annual, except P, Cp, PRV, & PRSB, if no liquid leaks and no major gas leaks > 0.5% of total components inspected per inspection period for 12 consecutive months. Leaks from PRSB not included in total count of leaking components. (2)Components located at <u>onshore facilities</u> shall either be subject to (1) or that any leak, from components not subject to an inspection program that are detected by the District, may constitute a violation.)				

Table II
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Rule/Measure	Rule/Measure				
	RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.	BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil production Facilities. 10/17/90.	SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)	
	<u>Rule Exemption:</u> - one-half inch and smaller fittings which have been demonstrated to the APCO to be leak-free based on an initial inspection in accordance with Method 21.	<u>Rule Exemption:</u> (Similar to what RACT exempts for inspection only.)	<u>Rule Exemption:</u> - natural gas distribution, transportation and storage facilities, including underground storage and associated processing facilities. Written petition must be submitted to APCO. - natural gas streams which contain more than or equal to 90% methane by volume. Written petition must be submitted to APCO. - liquid streams with a water content in excess of 90 % by volume. Written petition must be submitted to APCO.		

Table II
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Rule/Measure	Rule/Measure				
	RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.	BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil production Facilities. 10/17/90.	SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)	
Applicability	Components including but not limited to valves (V), flanges (F), fittings (C), pumps (P), compressors (Cp), pressure relief devices (PRV), diaphragms, hatches, sight-glasses, and meters at refineries, chemical plants, oil & gas processing plants including offshore platforms, and pipeline transfer stations.	Valves, fittings, pumps, compressors, pressure relief devices, diaphragms, hatches, sight-glasses, and meters at refineries, chemical plants, oil and gas production fields, natural gas processing plants, and pipeline transfer stations.	Valves, flanges, chokes, stuffing boxes, pumps, compressors, pressure relief valves, threaded connections, hatches, sight glasses, fittings liquid pools, open vessels, and spills at natural gas and crude oil production facilities.	Components in liquid or gaseous hydrocarbon service at refineries, chemical plants, oil and gas production fields, oil and gas processing plants, and pipeline transfer stations.	
Comments	RACT has the most comprehensive exemptions and applicability category.				

Table II
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Rule/Measure	Rule/Measure				
	RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.	BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil production Facilities. 10/17/90.	SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)	
	<u>Comp. classifications:</u> - Major: ≥ 4 " V, ≥ 5 -hp P, any Cp, and ≥ 4 " PRV. - Minor: not a major. - Critical: require unit shutdown if component taken out of service. - Inaccessible: $>15'$ above ground when access required from ground; $>6'$ away from platform when access required from platform. - Unsafe: as defined by OSHA standards or in provisions for worker safety found in 29 CFR 1910.				

Table II
Identification of Performance Standards
Source Category: Fugitive Emissions from Oil and Gas Production

Rule/Measure	Rule/Measure				
	RACT Determination of Fugitive Emissions of VOCs from Oil and Gas Production and Processing Facilities, Refineries, Chemical Plants, and Pipeline Transfer Stations. 12/8/93.	SCAQMD Rule 1173. Fugitive Emissions of Volatile Organic Compounds. 5/13/94.	BAAQMD Regulation 8-Organic Compounds, Rule 37-Natural Gas and Crude Oil production Facilities. 10/17/90.	SBCAPCD Rule 331. Fugitive Emissions Inspection and Maintenance. 12/10/91. (Note: Similar to or less stringent than RACT except as noted)	
	<u>Definitions:</u> - Unmanned Facility: remote facility which has no permanent sited personnel and is greater than 5 miles from the closest manned facility.				

Fugitive Emissions from Petroleum Refineries

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Petroleum Refineries

Regulated Component	Pollutant						
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.	BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.	Note: Other applicable performance standards appear on Table I (2 of 2) for the source category of "Fugitive Emissions of VOCs from Chemical Plants"			
Leak Definitions:		Conc. of total organic compounds, including methane, measured above background, expressed as methane and measured 1 cm or less from leak source; EPA Ref. Method 21 "Method 21".	Conc. of total organic compounds, including methane, measured above background, expressed as methane and measured 1 cm or less from leak source; EPA Ref. Method 21 "Method 21".				
Major Gas Leak Definitions:		> 100 ppm (valves, connectors) > 500 ppm (pumps & compressors, pressure relief devices)	> 10,000 ppm				
Minor Gas Leak Definitions:		Same as Major	> 10,000 ppm				
Major Liquid Leak Definitions:		Dripping of total organic compounds (TOC) at rate > 3 drops/min. and a conc. of TOC > applicable leak standard (gas leak definitions)					

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Petroleum Refineries

Regulated Component	Pollutant						
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.	BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.	Note: Other applicable performance standards appear on Table I (2 of 2) for the source category of "Fugitive Emissions of VOCs from Chemical Plants"			
Minor Liquid Leak Definitions:		Same as major					
A. Leak Control Requirements	VOC						
A1. <u>Gas leaks allowed (<200 components):</u> - Valves (V) - Pumps seals (P) - Compressors seals (Cp) - Pressure Relief Valves (PRV) - Hatches - Open ended lines (OEL) - Other components		N/A	N/A				

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Petroleum Refineries

Regulated Component	Pollutant								
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.		BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.		Note: Other applicable performance standards appear on Table I (2 of 2) for the source category of “Fugitive Emissions of VOCs from Chemical Plants”			
A2. <u>Gas leaks allowed (>200 components):</u> - Valves (V) - Pumps seals (P) - Compressors seals (Cp) - Pressure Relief Valves (PRV) - Hatches - Open ended lines (OEL) - Other components			N/A		N/A				
B. Components ID	VOC		Yes		Yes				
B1. <u>All components physically identified:</u>			- not specified		- not specified				
B2. <u>Components identified on flow diagrams:</u>			- No		- No				

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Petroleum Refineries

Regulated Component	Pollutant						
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.		BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.		Note: Other applicable performance standards appear on Table I (2 of 2) for the source category of "Fugitive Emissions of VOCs from Chemical Plants"	
C. Operators Inspection Requirements							
<u>C1. Audio-visual insp.</u>			- Daily (pumps & compressors) If leak observed, determine VOC concentration.		- None specified.		
<u>C2. Hydrocarbon analyzer Monitoring (Method 21) - Accessible components:</u>			- Quarterly (valves, pressure relief devices, pumps & compressors)		- Quarterly		
<u>C2. Hydrocarbon analyzer Monitoring (Method 21) - Threaded Connections & Flanges:</u>			- <u>For connectors opened during a turnaround,</u> inspect within 90 days after start-up is completed.		N/A		

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Petroleum Refineries

Regulated Component	Pollutant						
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.		BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.		Note: Other applicable performance standards appear on Table I (2 of 2) for the source category of "Fugitive Emissions of VOCs from Chemical Plants"	
<u>C2. Hydrocarbon analyzer Monitoring (Method 21) - Inaccessible components:</u>			- Yearly (valves, pressure relief devices) (Note: PRDs equipped with weephole shall be inspected quarterly at outlet of weephole if horn outlet is inaccessible.)		- None specified		
<u>C2. Hydrocarbon analyzer Monitoring (Method 21) - Unsafe to monitor components:</u>			- Nothing specified		- Nothing specified		
<u>C2. Hydrocarbon analyzer Monitoring (Method 21) - PRV after a pressure relief:</u>			- 5 working days		- Nothing specified		
<u>C2. Hydrocarbon analyzer Monitoring (Method 21) - Monitoring frequency extended for good performance:</u>			- Annually (valves) If 1)leak free for 5 consecutive quarters; 2)approval from APCO.		- Nothing specified		

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Petroleum Refineries

Regulated Component	Pollutant						
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.	BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.	Note: Other applicable performance standards appear on Table I (2 of 2) for the source category of "Fugitive Emissions of VOCs from Chemical Plants"			
C3. <u>Tag all leaks detected.</u>		Yes - use brightly colored weatherproof tags showing date of leak detection.	Yes - use brightly colored weatherproof tags showing date of leak detection.				
D. Maintenance Requirements							
D1. <u>Non-Essential Components - Repair Gas Leaks Within:</u>		<u>Valves, Connectors, Pumps & Compressors:</u> - minimize within 24 hours. - repair within 7 days, 24 hours if discovered by APCO. <u>Pressure Relief Devices:</u> - minimize within 24 hours. - repair within 15 days, 7 days if discovered by APCO.	- repair within 15 days.				

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Petroleum Refineries

Regulated Component	Pollutant								
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.		BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.		Note: Other applicable performance standards appear on Table I (2 of 2) for the source category of "Fugitive Emissions of VOCs from Chemical Plants"			
<u>D1. Non-Essential Components - Repair Gas Leaks > 50,000 ppmv Within:</u>									
<u>D1. Non-Essential Components - Repair Major Liquid Leaks Within:</u>			- minimize within 24 hours and repair within 7 days.						
<u>D1. Non-Essential Components - Repair Minor Liquid Leaks Within:</u>			- minimize within 24 hours and repair within 7 days.						

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Petroleum Refineries

Regulated Component	Pollutant					
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.	BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.	Note: Other applicable performance standards appear on Table I (2 of 2) for the source category of "Fugitive Emissions of VOCs from Chemical Plants"		
D2. <u>Essential Components - Minimized Leaks Within:</u>		<p>- Within 24 hours.</p> <p><u>For Non-Repairable Valves, Pressure Relief Devices, Pumps or Compressors:</u></p> <p>1) repair or replace within 5 years or at next scheduled turnaround, whichever first.</p> <p>2) number awaiting repair not to exceed: 0.5% (valves) or 1% (pressure relief devices, pumps & compressors) of total number of non-repairable equipment allowed or 1 piece of equipment.</p> <p><u>Alternative to 2):</u></p> <p>- Measure for mass emissions within 7 days after leak discovered. Mass emission measurement must be less than: 0.1 lb/day (valves), 0.2 lb/day (PRDs, pumps & compressors)</p>	- minimize within 15 days and repair at next scheduled turnaround.			

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Petroleum Refineries

Regulated Component	Pollutant						
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.	BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.	Note: Other applicable performance standards appear on Table I (2 of 2) for the source category of "Fugitive Emissions of VOCs from Chemical Plants"			
		<ul style="list-style-type: none"> - Facility total # awaiting repair not to exceed: 1% (valves), 5% (PRDs, pumps & compressors). - If any component measurement is > 15 lb/day TOC, repair within 7 days. (Note: This implies that measurements between 15 lb/day and the mass emission standards above must use method 2).)					

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Petroleum Refineries

Regulated Component	Pollutant						
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.		BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.		Note: Other applicable performance standards appear on Table I (2 of 2) for the source category of "Fugitive Emissions of VOCs from Chemical Plants"	
<u>D2. Chronic Leakers:</u>							
<u>D2. OEL and V Located at End of Lines:</u>							
<u>D2. Hatches:</u>							
<u>D3. Components inspected after repair or replacement with Method 21:</u>		- Within 24 hours		- None specified.			

Table I
Identification of Performance Standards
Source Category: Fugitive Emissions from Petroleum Refineries

Regulated Component	Pollutant								
		BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.		BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refineries and Chemical Plants. 6/15/94.		Note: Other applicable performance standards appear on Table I (2 of 2) for the source category of "Fugitive Emissions of VOCs from Chemical Plants"			
D4. Operator management plan:			N/A		N/A				

Table II
Identification of Performance Standards
Source Category: Fugitive Emissions from Petroleum Refineries

Rule/Measure				
	BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.	BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refinery and Chemical Plants, Bulk Plants and Bulk Terminals. 6/1/94	Note : Other applicable performance standards appear on Table II (2 of 2) for the source category of "Fugitive Emissions of VOCs from Chemical Plants"	
Exemptions	<u>Visual Inspection Exemption:</u> - not apply to days when facility not staffed. <u>Inspection, Identification Exemption:</u> - equipment handling organic liquids having initial boiling point > 150 °C (302 °F)	<u>Leak/Repair Standards Exemption:</u> - any pressure relief valve on storage tanks. - the static upstream pressure exceeds the setpoint of the pressure relief valve.		
	<u>Inspection, Identification and Record Keeping Exemption:</u> - research and development plants which produce only non-commercial products solely for research and dev. purposes. - equipment in vacuum service.	<u>Leak/Repair Standards and Inspection Exemption:</u> - emissions from the pressure relief valve is vented to a vapor recovery or disposal system that is at least 95% efficient. - the pressure relief valve is protected by a rupture disk.		

Table II
Identification of Performance Standards
Source Category: Fugitive Emissions from Petroleum Refineries

Rule/Measure				
	BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.	BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refinery and Chemical Plants, Bulk Plants and Bulk Terminals. 6/1/94	Note : Other applicable performance standards appear on Table II (2 of 2) for the source category of "Fugitive Emissions of VOCs from Chemical Plants"	
	<p><u>Rule Exemption:</u></p> <ul style="list-style-type: none"> - Controlled seal systems and pressure relief devices vented to vapor recovery or disposal system which reduces emissions of organic compounds from the equipment by 95% or greater (exemption from rule except for provision on the determination of control efficiency). - Small facilities-facilities which have less than 100 valves or less than 10 pumps and compressors (these facilities are subjects to Regulation 8-22). - Bulk plant and terminal loading racks-connections at the interface between loading rack and the vehicle being loaded. - Storage tanks-appurtenances on storage tanks including pressure relief devices, which are subject to Regulation 8, Rule 5 Storage of Organic Liquids. 	<p><u>Rule Exemption:</u></p> <ul style="list-style-type: none"> - pressure relief valves handling only organic liquids with a vapor pressure less than 2.6 mmHg (0.05 psia) at 20 oC (68 oF) or exhibit a 10% evaporation point greater than 150 oC (302 oF) according to appropriate test method. - research or development facilities which produce only non-commercial products for research and development purposes. 		

Table II
Identification of Performance Standards
Source Category: Fugitive Emissions from Petroleum Refineries

Rule/Measure				
	BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.	BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refinery and Chemical Plants, Bulk Plants and Bulk Terminals. 6/1/94	Note : Other applicable performance standards appear on Table II (2 of 2) for the source category of "Fugitive Emissions of VOCs from Chemical Plants"	
Applicability	Leaking equipment at petroleum refineries, chemical plants, bulk plants and bulk terminals including but not limited to: valves, connectors, pumps, compressors, pressure relief devices, diaphragms, hatches, sight-glasses, fittings, sampling ports, meters, pipes & vessels.	Pressure relief valves on any equipment handling organic compounds at petroleum refineries and chemical plants.		
Comments	<u>Note:</u> Rule 18 - Valves and Connectors at Petroleum Refinery complexes, chemical Plants, Bulk Plants and Bulk Terminals and Rule 25 - Pump and Compressor Seals at Petroleum Refinery, Chemical Plants, Bulk Plants and Bulk Terminals has been consolidated and renamed: Rule 18 - Equipment Leaks, 1/7/98.			

Table II
Identification of Performance Standards
Source Category: Fugitive Emissions from Petroleum Refineries

Rule/Measure				
	BAAQMD Regulation 8-Organic Compounds, Rule 18-Equipment Leaks. 1/7/98.	BAAQMD Regulation 8-Organic Compounds, Rule 28-Pressure Relief Valves at Petroleum Refinery and Chemical Plants, Bulk Plants and Bulk Terminals. 6/1/94	Note : Other applicable performance standards appear on Table II (2 of 2) for the source category of "Fugitive Emissions of VOCs from Chemical Plants"	
	<p><u>Definition:</u></p> <ul style="list-style-type: none"> - Petroleum Refinery: Any facility that processes petroleum products as defined in Standard Industrial classification Manual as Industry No. 2911, Petroleum Refining. - Chemical Plants: Any facility engaged in producing organic or inorganic and/or manufacturing products by chemical processes. Any facility or operation that has 28 as first digits in their Standard Industrial Classification (SIC) Code as det. from the SIC Manual. May include, but not limited to the manufacture of: industrial inorganic and organic chemicals; plastic and synthetic resins, synthetic rubber, synthetic and other man made fibers; drugs; soap, detergents and cleaning preparations, perfumes, cosmetics and other toilet preparations; paints, varnishes, lacquers, enamels and allied products; agricultural chemicals; safflower and sunflower oil extracts; re-refining. 	<p><u>Definition:</u></p> <ul style="list-style-type: none"> - Chemical Plant: - Rupture Disc: The thin metal diaphragm held between flanges. - Background: - Inaccessible Pressure Relief Valve: 		

Gasoline Terminals and Bulk Plants

Table I
Identification of Performance Standards
Source Category: Gasoline Terminals and Bulk Plants

Regulated Component	Pollutant	Rule/Measure/Date									
		SCAQMD Rules 461, 462, and 463		SJVUAPCD Rules 4621, 4623, and 4624		SMAQMD Rules 446, 447, and 448		VCAPCD Rules 70 and 71.2		40 CFR Part 63 Subpart R	
		Performance Standard									
Terminals											
Storage Tank Filling	VOC	X	External floating roof w/ two-seal closure; fixed roof w/ internal floating roof; or fixed roof w/ 95-percent efficient vapor control and continuous monitor.		External floating roof w/ two-seal closure; fixed roof w/ internal floating roof; or fixed roof w/ 95-percent efficient vapor control.		External floating roof w/ two-seal closure; fixed roof w/ internal floating roof; or fixed roof w/ 95-percent efficient vapor control.		External floating roof w/ two-seal closure; fixed roof w/ internal floating roof; or fixed roof w/ 95-percent efficient vapor control.	X	External floating roof w/ two-seal closure; fixed roof w/ internal floating roof; or fixed roof w/ 95-percent efficient vapor control and continuous monitor.
Storage Tank Standing	VOC	X	External floating roof w/ two-seal closure; fixed roof w/ internal floating roof; or fixed roof w/ 95-percent efficient vapor control and continuous monitor.		External floating roof w/ two-seal closure; fixed roof w/ internal floating roof; or fixed roof w/ 95-percent efficient vapor control.		External floating roof w/ two-seal closure; fixed roof w/ internal floating roof; or fixed roof w/ 95-percent efficient vapor control.		External floating roof w/ two-seal closure; fixed roof w/ internal floating roof; or fixed roof w/ 95-percent efficient vapor control.	X	External floating roof w/ two-seal closure; fixed roof w/ internal floating roof; or fixed roof w/ 95-percent efficient vapor control and continuous monitor.
Delivery Vessel Loading	VOC	X	Bottom loading; “CARB-certified;” 0.08 lbs/1000 gals; and continuous monitor.		Bottom loading; “CARB-certified;” 0.08 lbs/1000 gals.		“CARB-certified;” 0.08 lbs/1000 gals.		Bottom loading; “CARB-certified;” 0.08 lbs/1000 gals.		0.08 lbs/1000 gals; and continuous monitor.
Bulk Plants											
Storage Tank Filling	VOC	X	“CARB-certified” 95-percent efficient	X	“CARB-certified” 95-percent efficient	X	“CARB-certified” 95-percent efficient	X	“CARB-certified” 95-percent efficient		

Table I
Identification of Performance Standards
Source Category: Gasoline Terminals and Bulk Plants

Regulated Component	Pollutant	Rule/Measure/Date									
		SCAQMD Rules 461, 462, and 463		SJVUAPCD Rules 4621, 4623, and 4624		SMAQMD Rules 446, 447, and 448		VCAPCD Rules 70 and 71.2		40 CFR Part 63 Subpart R	
		Performance Standard									
			vapor recovery system.		vapor recovery system.		vapor recovery system.		vapor recovery system.		
Storage Tank Standing	VOC	X	Fixed roof w/ p-v valve, 95-percent efficient vapor recovery system.	X	Fixed roof w/ p-v valve, 95-percent efficient vapor recovery system.	X	Fixed roof w/ p-v valve, 95-percent efficient vapor recovery system.	X	Fixed roof w/ p-v valve, 95-percent efficient vapor recovery system.		
Delivery Vessel Loading	VOC		Bottom loading; “CARB-certified” 90-percent efficient vapor recovery system.	X	95-percent efficient vapor recovery system.		“CARB-certified;” 0.6 lbs/1000 gals.		“CARB-certified” 90-percent efficient vapor recovery system.		

Table II
Identification of Performance Standards
Source Category: Gasoline Terminals and Bulk Plants

Rule/Measure	Rule/Measure				
	SCAQMD Rules 461, 462, and 463	SJVUAPCD Rules 4621, 4623, and 4624	SMAQMD Rules 446, 447, and 448	VCAPCD Rules 70 and 71.2	40 CFR Part 63 Subpart R
Exemptions	Filling, used ≥ 75 percent for implements of husbandry. Loading, $\leq 500,000$ gals/yr throughput.	Filling, none. Loading, none.	Filling, used primarily for implements of husbandry. Loading, none.	Filling, used exclusively for ag. ops, ≤ 1500 gals capacity, and $\leq 10,000$ gals/30 days. Loading, $\leq 200,000$ gals/12 mo, or exclusively vessels that serve exempt containers.	Facilities for which potential to emit hazardous air pollutants is less than 25 tpy.
Applicability	Gasoline storage tanks, tank trucks, trailers, and railroad tank cars.	Gasoline storage tanks, tank trucks, trailers, and railroad tank cars.	Gasoline storage tanks, tank trucks, trailers, and railroad tank cars.	Gasoline storage tanks, tank trucks, trailers, and railroad tank cars.	Bulk gasoline terminals and pipeline breakout stations.
Comments	See below.	See below.	See below.	See below.	See below.

SCAQMD	Rule 461 --	GASOLINE TRANSFER AND DISPENSING (1/9/76, 9/3/76, 2/4/77, 11/18/77, 2/3/78, 1/5/79, 5/4/79, 12/7/79, 1/16/81, 10/15/82, 11/1/85, 3/4/88, 7/7/89, 9/8/95)
	Rule 462 --	ORGANIC LIQUID LOADING (1/9/76, 5/5/78, 10/14/79, 4/4/86, 12/7/90, 6/9/95)
	Rule 463 --	ORGANIC LIQUID STORAGE (8/15/77, 6/1/84, 12/7/90, 3/11/94)
SJVUAPCD	Rule 4621 --	GASOLINE TRANSFER TO STATIONARY STORAGE CONTAINERS, DELIVERY VESSELS, AND BULK PLANTS (4/11/91, 9/19/91, 12/17/92, 5/20/93)
	Rule 4623 --	STORAGE OF ORGANIC LIQUIDS (4/11/91, 9/19/91, 12/17/92)
	Rule 4624 --	ORGANIC LIQUID LOADING (4/11/91, 9/19/91, 12/17/92)
SMAQMD	Rule 446 --	STORAGE OF PETROLEUM PRODUCTS (6/1/74, 8/3/77, 11/29/83, 12/4/90, 11/16/93)

Table II
Identification of Performance Standards
Source Category: Gasoline Terminals and Bulk Plants

	Rule 447 --	ORGANIC LIQUID LOADING (1/14/74, 12/6/78, 5/15/79, 8/31/82, 11/29/83, 11/20/84, 4/18/89, 4/3/90, 4/30/91, 11/16/93, 9/5/96, 4/3/97)
	Rule 448 --	GASOLINE TRANSFER INTO STATIONARY STORAGE CONTAINERS (2/5/75, 9/15/75, 8/3/77, 9/2/80, 12/17/91, 2/2/95)
VCAPCD 5/9/95,	Rule 70 --	STORAGE AND TRANSFER OF GASOLINE (6/25/74, 9/16/75, 4/13/76, 7/6/76, 3/8/77, 6/14/77, 3/27/79, 12/2/80, 7/5/83, 11/29/88, 5/4/93, 5/13/97)
	Rule 71.2 --	STORAGE OF REACTIVE ORGANIC COMPOUND LIQUIDS (6/20/78, 7/10/79, 7/5/83, 11/22/88, 9/26/89)
40 CFR Part 63, Subpart R --		NATIONAL EMISSION STANDARDS FOR GASOLINE DISTRIBUTION FACILITIES (BULK GASOLINE TERMINALS AND PIPELINE BREAKOUT STATIONS) (<u>Federal Register</u> Vol. 59, No. 239, 12/14/94)

CH&SC 41954. (a) The state board shall adopt procedures for determining the compliance of any system designed for the control of gasoline vapor emissions during gasoline marketing operations, including storage and transfer operations, with performance standards which are reasonable and necessary to achieve or maintain any applicable ambient air quality standard.

...

(c) The state board shall certify, in cooperation with the districts, any gasoline vapor control system, upon its determination that the system, if properly installed and maintained, will meet the requirements of subdivision (a). The state board shall enumerate the specifications used for issuing the certification...

(d) The state board may test, or contract for testing, gasoline vapor control systems for the purpose of certifying them.

...

CH&SC 41962. (a) ...the state board shall adopt test procedures to determine the compliance of vapor recovery systems of cargo tanks on tank vehicles used to transport gasoline with vapor emission standards which are reasonable and necessary to achieve or maintain any applicable ambient air quality standard...

(b) The state board may test, or contract for testing, the vapor recovery system of any cargo tank of any tank or any tank vehicle used to transport. The state board shall certify the cargo tank vapor recovery system upon its determination that the system, if properly installed and maintained, will meet the requirements of subdivision (a). The state board shall enumerate the specifications used for issuing such certification...

(c) ...certification...shall be done annually...

Graphic Arts

Table I (1 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area 8-20, Graphic Arts Printing & Coating Operations, 12/20/95		El Dorado 231, Graphic Arts Operations, 09/27/94		Kern 410.7, Graphic Arts, 03/07/96		Mojave 1117, Graphic Arts, 06/22/94		Placer 239, Graphic Arts Operations, 08/14/97	
		Performance Standard									
exempt compounds	VOC		other compounds		methylene chloride; 1,1,1,trichloroethane plus other compounds		methylene chloride; 1,1,1,trichloroethane plus other compounds		methylene chloride; 1,1,1,trichloroethane plus other compounds		methylene chloride; 1,1,1,trichloroethane; perchloroethylene plus other compounds
ink	VOC	x	300 grams VOC per liter of product, less water, as applied	x	300 grams VOC per liter of material, less water and exempt compounds, as applied	x	300 grams VOC per liter, less water and exempt compounds	x	300 grams VOC per liter, less water and exempt compounds, as applied	x	300 grams VOC per liter of material, less water and exempt compounds, as applied
coating	VOC	x	300 grams VOC per liter of product, less water, as applied	x	300 grams VOC per liter of material, less water and exempt compounds, as applied	x	300 grams VOC per liter, less water and exempt compounds	x	300 grams VOC per liter, less water and exempt compounds, as applied	x	300 grams VOC per liter of material, less water and exempt compounds, as applied
adhesive	VOC	x	150 grams VOC per liter of product, less water, as applied		300 grams VOC per liter of material, less water and exempt compounds, as applied		300 grams VOC per liter, less water and exempt compounds		300 grams VOC per liter, less water and exempt compounds, as applied		300 grams VOC per liter of material, less water and exempt compounds, as applied
web splicing adhesive	VOC	x	300 grams VOC per liter of product, less water, as applied								
specialty inks	VOC										
• metallic ink	VOC										

Table I (1 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area 8-20, Graphic Arts Printing & Coating Operations, 12/20/95		El Dorado 231, Graphic Arts Operations, 09/27/94		Kern 410.7, Graphic Arts, 03/07/96		Mojave 1117, Graphic Arts, 06/22/94		Placer 239, Graphic Arts Operations, 08/14/97	
		Performance Standard									
• matte finish ink	VOC										
fountain solution	VOC	x	8 % VOC by volume ~ 63 g/l ¹		116 grams of VOC per liter of material, as applied		15 % by volume				116 grams VOC per liter of material, as applied
publication gravure	VOC	x	overall collection and control efficiency of 85% mass basis		see emissions control (67 %)		90% capture efficiency; 95% control device efficiency; or emission reduced by at least 85% overall		90% control device efficiency, and 75 % combined capture and control emission reduction efficiency		see emissions control (67 %)
packaging gravure	VOC	x	75% see gravure		see emissions control (67 %)		90% capture efficiency; 95% control device efficiency; or emission reduced by at least 75% overall		90% control device efficiency, and 65 % combined capture and control emission reduction efficiency		see emissions control (67 %)

¹63 g/l VOC was a rough calculation for the equivalent VOC content of 8%; the next lowest VOC content requirement is 100 g/l

Table I (1 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area 8-20, Graphic Arts Printing & Coating Operations, 12/20/95		El Dorado 231, Graphic Arts Operations, 09/27/94		Kern 410.7, Graphic Arts, 03/07/96		Mojave 1117, Graphic Arts, 06/22/94		Placer 239, Graphic Arts Operations, 08/14/97	
		Performance Standard									
specialty gravure	VOC	x	75% see gravure		see emissions control (67 %)		90% capture efficiency; 95% control device efficiency; or emission reduced by at least 75% overall				see emissions control (67 %)
gravure	VOC	x	collection and control efficiency of 75% overall on a mass basis		see emissions control (67 %)						see emissions control (67 %)
flexography	VOC	x	collection and control efficiency of 75% overall on a mass basis		see emissions control (67 %)		90% capture efficiency; 95% control device efficiency; or emission reduced by at least 75% overall		90% control device efficiency, and 60 % combined capture and control emission reduction efficiency		see emissions control (67 %)
letterpress	VOC	x	collection and control efficiency of 75% overall on a mass basis		see emissions control (67 %)		90% capture efficiency; 95% control device efficiency; or emission reduced by at least 75% overall		exempt		see emissions control (67 %)

Table I (1 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area 8-20, Graphic Arts Printing & Coating Operations, 12/20/95		El Dorado 231, Graphic Arts Operations, 09/27/94		Kern 410.7, Graphic Arts, 03/07/96		Mojave 1117, Graphic Arts, 06/22/94		Placer 239, Graphic Arts Operations, 08/14/97	
		Performance Standard									
lithographic	VOC	x	collection and control efficiency of 75% overall on a mass basis		see emissions control (67 %)		90% capture efficiency; 95% control device efficiency; or emission reduced by at least 75% overall		exempt		see emissions control (67 %)
wall paper screen	VOC				see emissions control (67 %)						
General Emission Limitations:											
emission from printing and drying operations	VOC										
emissions from other types of printing	VOC										
emissions control	VOC		collection and control efficiency of 75% overall on a mass basis		control device efficiency of 95 % on a mass basis and emission collection efficiency of 70 %						control device efficiency of 95 % on a mass basis and emission collection efficiency of 70 %

Table I (1 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area 8-20, Graphic Arts Printing & Coating Operations, 12/20/95		El Dorado 231, Graphic Arts Operations, 09/27/94		Kern 410.7, Graphic Arts, 03/07/96		Mojave 1117, Graphic Arts, 06/22/94		Placer 239, Graphic Arts Operations, 08/14/97	
		Performance Standard									
records - lists of solutions	VOC		maintain list of inks, coating, adhesives, fountain solutions and makeup solvent with the VOC content		maintain list of inks, coating, adhesives, fountain solutions, makeup solvent, surface preparation and cleanup solvents with the VOC content		maintain list of inks and solvents with the mix ratio of components used, VOC content and chemical constituents		material name, manufacturer id, mixing instruction , VOC content for ink, coating, and adhesive (packaging rotogravure, publication rotogravure, and flexographic printing)		maintain list of inks, coating, adhesives, fountain solutions, makeup solvents, surface prep, and cleanup solvents with the VOC content on an as applied basis
records - type & quantity of use	VOC		record type and quantity of ink, coating, adhesive, fountain solution and makeup solvent use on a monthly basis		record type and quantity of use on a monthly basis		maintain records on a daily and monthly basis: vol ink/solvent mix ratio; VOC content (lbs/gal); vol of coating or ink used (gal) VOC content and quantity of solvent (gal)		quantity of ink, coating, and adhesive used on a daily basis (if complying)		record type and quantity of use on a monthly basis
records - retention time	VOC		retain records for two years		retain records for two years		retain records for two years	x	retain records for five years		retain records for two years

Table I (1 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area 8-20, Graphic Arts Printing & Coating Operations, 12/20/95		El Dorado 231, Graphic Arts Operations, 09/27/94		Kern 410.7, Graphic Arts, 03/07/96		Mojave 1117, Graphic Arts, 06/22/94		Placer 239, Graphic Arts Operations, 08/14/97	
		Performance Standard									
monitoring	VOC	x	emission controls shall have a readily visible temperature gauge monitoring the operating temperature during operation								
					record type and quantity of ink, coating, adhesive, fountain solution, makeup solvent, surface preparation and cleanup solvents on a daily basis if using emission controls				type and amount of ink, coating, and adhesive used with VOC content and density recorded daily		record type and quantity of use on a daily basis if using emission controls
		x	daily records of key system operating parameters						daily records of key system operating parameters		O & M plan required
		x	exempt facilities maintain records	x	exempt facilities maintain records	x	exempt facilities maintain records	x	exempt facilities maintain records	x	exempt facilities maintain records

Table I (2 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Regulated Component	Pollutant	Rule/Measure/Date									
		Sacramento 450, Graphic Arts Operations, 12/05/96		San Diego 67.16, Graphic Arts Operations, 05/15/96		San Joaquin Valley 4607, Graphic Arts, 09/17/97		South Coast 1130, Graphic Arts, 03/08/96		Ventura 74.19, Graphic Arts, 09/10/96	
		Performance Standard									
exempt compounds	VOC		methylene chloride; 1,1,1,trichloroethane; perchloroethylene plus other compounds		methylene chloride; 1,1,1,trichloroethane; perchloroethylene plus other compounds		methylene chloride; 1,1,1,trichloroethane; plus other compounds		methylene chloride; 1,1,1,trichloroethane; perchloroethylene plus others		methylene chloride; 1,1,1,trichloroethane; plus other compounds
ink	VOC	x	300 grams of VOC per liter of materials, less water and exempt compounds	x	300 grams of VOC per liter as applied, less water and exempt compounds used	x	300 grams of VOC per liter less water and exempt compounds	x	300 grams of VOC per liter less water and exempt compounds	x	300 grams of VOC per liter as applied, less water and exempt compounds
coating	VOC	x	300 grams of VOC per liter of materials, less water and exempt compounds	x	300 grams of VOC per liter as applied, less water and exempt compounds used	x	300 grams of VOC per liter less water and exempt compounds	x	300 grams of VOC per liter less water and exempt compounds	x	300 grams of VOC per liter as applied, less water and exempt compounds
adhesive	VOC		300 grams of VOC per liter of materials, less water and exempt compounds		300 grams of VOC per liter as applied, less water and exempt compounds used		300 grams of VOC per liter less water and exempt compounds (150 g/l 9/17/99)		300 grams of VOC per liter less water and exempt compounds		300 grams of VOC per liter as applied, less water and exempt compounds
web splicing adhesive	VOC					x	300 grams of VOC per liter less water and exempt compounds (9/17/99)				
specialty inks							2 gallons per day 120 gallons per year		see metallic ink and matte finish ink		

Table I (2 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Regulated Component	Pollutant	Rule/Measure/Date									
		Sacramento 450, Graphic Arts Operations, 12/05/96		San Diego 67.16, Graphic Arts Operations, 05/15/96		San Joaquin Valley 4607, Graphic Arts, 09/17/97		South Coast 1130, Graphic Arts, 03/08/96		Ventura 74.19, Graphic Arts, 09/10/96	
		Performance Standard									
• metallic ink	VOC						485 g/l (9/17/98)		300 g/l unless usage is 2 gallons/day and 125 gallons/year or less and the PTE is 10 tons/yr or less and the VOC content < 535 g/l		
• matte finish ink	VOC						535 g/l (9/17/98)		300 g/l unless usage is 2 gallons/day and 125 gallons/year or less and the PTE is 10 tons/yr or less and the VOC content < 460 g/l		
fountain solution	VOC		116 grams VOC per liter of material, as applied		15 % by volume VOC, as applied		15 % VOC by volume (10 % in 1998, 8 % in 2000)	x	100 grams VOC per liter of material or 67 % overall control		115 grams VOC per liter
publication gravure	VOC		exempt	x	85 % see emission control (same as Bay Area)		75 % combined collection and control		75 % overall control efficiency		capture and control combined efficiency of 75 %
packaging gravure	VOC		67% or 75% reduction per production unit on a daily basis (see emissions control)		85 % see emission control		67% combined collection and control see emissions from other types of printing		67 % overall control efficiency		67% see emissions from other types of printing

Table I (2 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Regulated Component	Pollutant	Rule/Measure/Date									
		Sacramento 450, Graphic Arts Operations, 12/05/96		San Diego 67.16, Graphic Arts Operations, 05/15/96		San Joaquin Valley 4607, Graphic Arts, 09/17/97		South Coast 1130, Graphic Arts, 03/08/96		Ventura 74.19, Graphic Arts, 09/10/96	
		Performance Standard									
specialty gravure	VOC		67% or 75% reduction per production unit on a daily basis (see emissions control)		85 % see emission control		67% combined collection and control see emissions from other types of printing				67% see emissions from other types of printing
gravure	VOC				85 % see emission control		67% combined collection and control see emissions from other types of printing				67% by weight see emissions from other types of printing
flexography	VOC		67% or 75% reduction per production unit on a daily basis (see emissions control)		85 % see emission control		67% combined collection and control see emissions from other types of printing		67 % overall control efficiency		67% by weight see emissions from other types of printing
letterpress	VOC		67% or 75% reduction per production unit on a daily basis (see emissions control)		85 % see emission control		67% combined collection and control see emissions from other types of printing		67 % overall control efficiency		67% by weight see emissions from other types of printing
lithographic	VOC		67% or 75% reduction per production unit on a daily basis (see emissions control)		85 % see emission control		67% combined collection and control see emissions from other types of printing		67 % overall control efficiency		67% by weight see emissions from other types of printing

Table I (2 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Regulated Component	Pollutant	Rule/Measure/Date									
		Sacramento 450, Graphic Arts Operations, 12/05/96		San Diego 67.16, Graphic Arts Operations, 05/15/96		San Joaquin Valley 4607, Graphic Arts, 09/17/97		South Coast 1130, Graphic Arts, 03/08/96		Ventura 74.19, Graphic Arts, 09/10/96	
		Performance Standard									
wall paper screen	VOC		67% or 75% reduction per production unit on a daily basis (see emissions control)								
General Emission Limitations:											
emission from printing and drying operations	VOC										
emissions from other types of printing	VOC					overall control efficiency of 67 %					67 % by weight
emissions control	VOC		control device efficiency of 95 % on a mass basis and emission collection efficiency of 70 %	x	85 % combined capture and control device efficiency						
records - lists of solutions	VOC		maintain list with the VOC content on an as-applied basis		maintain list with the type, dilution ratio, VOC content		maintain list with the material name, manufacturer's name, VOC content as applied, mixing instructions, density, and vapor pressure		see Rule 109 list district rule number, permit units involved, method of application and substrate type, the VOC content		maintain list including material name, manufacturer id, mixing instructions and VOC content

Table I (2 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Regulated Component	Pollutant	Rule/Measure/Date									
		Sacramento 450, Graphic Arts Operations, 12/05/96		San Diego 67.16, Graphic Arts Operations, 05/15/96		San Joaquin Valley 4607, Graphic Arts, 09/17/97		South Coast 1130, Graphic Arts, 03/08/96		Ventura 74.19, Graphic Arts, 09/10/96	
		Performance Standard									
records - type & quantity of use	VOC		record quantity of use on a monthly basis		record quantity of use on a daily or monthly basis		record quantity of use on a monthly basis		amount and type of graphic arts material used		record quantity of use on a daily basis (or monthly for small use and research exemption)
records - retention time	VOC		retain records for two years		retain records for three years		retain records for two years		retain records for two years		retain records for two years
monitoring	VOC										
			daily records of the type and volume of materials used if using control system		daily records of the type and volume of materials used if using control system		daily records of the type and volume of materials u sed if using control system				
			O & M plan required		daily records of key system operating parameters		daily records of key system operating parameters				daily records of key system operating parameters
		x	exempt facilities maintain records	x	exempt facilities maintain records	x	exempt facilities maintain records		* not clear		

Table I (3 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Regulated Component	Pollutant	Rule/Measure/Date									
		Yolo-Solano 2.29, Graphic Arts Printing Operations, 05/25/94		Printing and Publishing NESHAP							
		Performance Standard									
exempt compounds	VOC		methylene chloride; 1,1,1,trichloroethane plus others								
ink	VOC	x	300 grams VOC per liter of product as applied, less water and exempt compounds		limit emissions to < 4 % of the mass for the month for product and packaging rotogravure or wide-web flexographic printing						
coating	VOC	x	300 grams VOC per liter of product as applied, less water and exempt compounds		limit emissions to < 4 % of the mass for the month for product and packaging rotogravure or wide-web flexographic printing						

Table I (3 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Regulated Component	Pollutant	Rule/Measure/Date									
		Yolo-Solano 2.29, Graphic Arts Printing Operations, 05/25/94		Printing and Publishing NESHAP							
		Performance Standard									
adhesive	VOC	x	150 grams VOC per liter of product as applied, less water and exempt compounds		limit emissions to < 4 % of the mass for the month for product and packaging rotogravure or wide-web flexographic printing						
web splicing adhesive	VOC		300 grams VOC per liter of product as applied, less water and exempt compounds		limit emissions to < 4 % of the mass for the month for product and packaging rotogravure or wide-web flexographic printing						
specialty inks	VOC										
• metallic ink	VOC										
• matte finish ink	VOC										
fountain solution	VOC		100 g of VOC per liter of material, as applied								

Table I (3 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Regulated Component	Pollutant	Rule/Measure/Date								
		Yolo-Solano 2.29, Graphic Arts Printing Operations, 05/25/94		Printing and Publishing NESHAP						
		Performance Standard								
publication gravure	VOC		85 % see emissions from printing and drying operations		92% overall control of organic HAP (assume HAP control = VOC control) or mass of organic HAP < 8% of the mass of volatile matter used					
packaging gravure	VOC		85 % see emissions from printing and drying operations		95% overall control of organic HAP (assume HAP control = VOC control) mass of organic HAP < 5% of the mass of volatile matter used					
specialty gravure	VOC		85 % see emissions from printing and drying operations							
gravure	VOC		75 % overall collection and control efficiency							

Table I (3 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Regulated Component	Pollutant	Rule/Measure/Date									
		Yolo-Solano 2.29, Graphic Arts Printing Operations, 05/25/94		Printing and Publishing NESHAP							
		Performance Standard									
flexography	VOC		75 % overall collection and control efficiency		95% overall control of organic HAP (assume HAP control = VOC control)						
letterpress	VOC		75 % overall collection and control efficiency								
lithographic	VOC		75 % overall collection and control efficiency								
wall paper screen	VOC										
General Emission Limitations:											
emissions from printing and drying operations	VOC		overall collection and control efficiency of 85 % mass basis								
emission from other types of printing	VOC										

Table I (3 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Regulated Component	Pollutant	Rule/Measure/Date									
		Yolo-Solano 2.29, Graphic Arts Printing Operations, 05/25/94		Printing and Publishing NESHAP							
		Performance Standard									
emissions control	VOC			92% overall control of organic HAP (assume HAP control = VOC control) for publication rotogravure and 95 % overall control of organic HAP for product and packaging rotogravure and wide-web flexographic printing							
records - lists of solutions	VOC		maintain list with the VOC content								
records - type & quantity of use	VOC		record quantity of use on a monthly basis								

Table I (3 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Regulated Component	Pollutant	Rule/Measure/Date									
		Yolo-Solano 2.29, Graphic Arts Printing Operations, 05/25/94		Printing and Publishing NESHAP							
		Performance Standard									
records - retention time	VOC		retain records for two years								
monitoring	VOC										
			daily records of the type and volume of materials used if using control system								
			O & M plan required and daily record key operating parameters								

Table II (1 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Rule/Measure	Rule/Measure				
	Bay Area 8-20, Graphic Arts Printing & Coating Operations, 12/20/95	El Dorado 231, Graphic Arts Operations, 09/27/94	Kern 410.7, Graphic Arts, 03/07/96	Mojave 1117, Graphic Arts, 06/22/94	Placer 239, Graphic Arts Operations, 08/14/97
Exemptions	small user emitting < 400 lbs per month including surface prep and cleanup	small user emitting < 660 lbs per month including surface prep and cleanup	any facility emitting < 75 lbs per day	any facility emitting < 2500 lbs per month	any facility emitting < 660 lbs per month including surface prep and cleanup
	laboratory and experimental operations < 300 lbs per month	laboratory and experimental operations < 300 lbs per month			research and test < 300 lbs per month
	circuit board printing				
	heat shrinkable tubing				
	water slide decals				

Table II (1 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Rule/Measure	Rule/Measure				
	Bay Area 8-20, Graphic Arts Printing & Coating Operations, 12/20/95	El Dorado 231, Graphic Arts Operations, 09/27/94	Kern 410.7, Graphic Arts, 03/07/96	Mojave 1117, Graphic Arts, 06/22/94	Placer 239, Graphic Arts Operations, 08/14/97
Applicability	graphic arts operations and graphic arts lines	graphic arts operations	graphic arts printing operations	any packaging rotogravure, publication rotogravure, or flexographic printing operation	graphic arts operations
				any person who manufactures sells, offers for sale, or supplies ink, coating or adhesive containing VOC for use in above operations	any person who manufactures, sells, offers to sell, or supplies graphic arts materials
	gravure	packaging gravure, specialty gravure	gravure	packaging rotogravure	packaging rotogravure, specialty gravure
	publication gravure	publication gravure		publication rotogravure	publication gravure
	flexographic printing	printing operations	flexographic printing	flexographic printing	flexographic printing
	screen printing	web-feed wall paper screen printing	screen printing	exempt	exempt
	letterpress	letterpress	letterpress	exempt	letterpress
	lithographic printing	lithographic printing	lithographic printing	exempt	lithographic printing

Table II (1 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Rule/Measure	Rule/Measure				
	Bay Area 8-20, Graphic Arts Printing & Coating Operations, 12/20/95	El Dorado 231, Graphic Arts Operations, 09/27/94	Kern 410.7, Graphic Arts, 03/07/96	Mojave 1117, Graphic Arts, 06/22/94	Placer 239, Graphic Arts Operations, 08/14/97
	coating or laminating for flexible packaging materials	coating or laminating for flexible packaging materials	coating or laminating for flexible packaging materials		coating or laminating for flexible packaging materials
Comments					

Table II (2 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Rule/Measure	Rule/Measure				
	Sacramento 450, Graphic Arts Operations, 12/05/96	San Diego 67.16, Graphic Arts Operations, 05/15/96	San Joaquin Valley 4607, Graphic Arts, 09/17/97	South Coast 1130, Graphic Arts, 03/08/96	Ventura 74.19, Graphic Arts, 09/10/96
Exemptions	small user emitting < 660 lbs per month including surface prep and cleanup	source emitting < 15 lbs per day	any operation emitting < 400 lbs per month	facility emitting < 8 lbs per day including solvent cleaning operations	facility emitting < 175 lbs per month including solvent cleaning operations
	laboratory and experimental operations < 300 lbs per month				research, classroom instruction laboratory analysis < 175 lbs per month
		ceramic or circuit boards		ceramic materials, circuitry printing	ceramic materials, circuit board printing
		manufacture of solar control window film, heat applied transfer decals, ceramic decals for firing above 800 F		solar control window film, heat-applied transfer decals,	
		water slide decals			
		proofing systems	proof presses	proof presses	
		embossing and foil stamping which does not use VOC			
		paper, film, and fabric coating operations (subject to Rule 67.5)			

Table II (2 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Rule/Measure	Rule/Measure				
	Sacramento 450, Graphic Arts Operations, 12/05/96	San Diego 67.16, Graphic Arts Operations, 05/15/96	San Joaquin Valley 4607, Graphic Arts, 09/17/97	South Coast 1130, Graphic Arts, 03/08/96	Ventura 74.19, Graphic Arts, 09/10/96
		lithographic printing plate development			lithographic printing plate making
		blanket repair material applied from non-refillable aerosol containers of 4 ounces or less	blanket repair material applied from containers of 4 ounces or less	blanket repair material applied from containers of 4 ounces or less	
				sterilization indicating inks	sterilization indicating inks
			aerosol adhesives	aerosol coating products	
	publication rotogravure				
Applicability	graphic arts operations	continuous web or single sheet fed graphic arts printing, processing, laminating or drying operations	graphic arts printing operation and paper or fabric coating operation		any person who uses ink, coating, adhesive, fountain solution, or solvent containing VOC as part of a graphic arts operations
				persons performing graphic arts operations or who solicit, specify, offer for sale, sell or distribute graphic arts materials	any person in the District who manufactures ink, coating, adhesive, fountain solution, or solvent containing VOC sold for use in graphic arts operations

Table II (2 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Rule/Measure	Rule/Measure				
	Sacramento 450, Graphic Arts Operations, 12/05/96	San Diego 67.16, Graphic Arts Operations, 05/15/96	San Joaquin Valley 4607, Graphic Arts, 09/17/97	South Coast 1130, Graphic Arts, 03/08/96	Ventura 74.19, Graphic Arts, 09/10/96
	packaging gravure, specialty gravure	gravure	gravure	gravure	
	exempts publication rotogravure				
	flexographic printing	flexography	flexography	flexography	
	web-feed wall paper screen printing	screen	screen		screen printing exempt
	letterpress	letterpress	letterpress	letterpress	
	lithographic printing operation	lithography	lithography	lithography	
	coating or laminating for flexible packaging materials	coating or laminating	coating or laminating	coating or laminating	
Comments			~500 facilities; 35 permitted		

Table II (3 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Rule/Measure	Rule/Measure				
	Yolo-Solano 2.29, Graphic Arts Printing Operations, 05/25/94	Printing and Publishing NESHAP			
Exemptions	small user emitting < 400 lbs per month including surface prep and cleanup	proof presses			
	laboratory and experimental operations < 300 lbs per month	sum total mass of materials applied < 5 weight percent of the total mass of materials applied per month			
		non-major sources			

Table II (3 of 3)
Identification of Performance Standards
Source Category: Graphic Arts

Rule/Measure	Rule/Measure				
	Yolo-Solano 2.29, Graphic Arts Printing Operations, 05/25/94	Printing and Publishing NESHAP			
Applicability	graphic arts operations	new and existing major source of HAPs			
	packaging gravure, specialty gravure	product and packaging rotogravure			
	publication gravure	publication rotogravure			
	flexographic printing	wide-web flexographic printing (18" wide or more)			
	web-feed wall paper screen printing	not covered			
	letterpress	not covered			
	lithographic printing operation	not covered			
	coating or laminating for flexible packaging materials	not covered if no printing			
Comments					

Industrial Boilers

Table I
Identification of Performance Standards
Source Category: Industrial Boilers

Regulated Component	Pollutant	Rule/Measure/Date								
		Santa Barbara 342, Control of Oxides of Nitrogen (NO _x) from Boilers, Steam Generators and Process Heaters, Amended 4/17/97		Yolo-Solano 2.27, Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters, Amended 8/14/96		Determination of Reasonably Available Control Technology and Best Available Retrofit Control Technology for Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters, CARB, 7/18/91				
		Performance Standard								
Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters	NOx	x	30 ppm @ 3% oxygen on a dry basis, 10 minute avg, gaseous fuel 40 ppm @ 3% oxygen on a dry basis, 10 minute avg, nongaseous fuel	x	30 ppm @ 3% oxygen on a dry basis, 15 minute avg, gaseous fuel 40 ppm @ 3% oxygen on a dry basis, 15 minute avg, nongaseous fuel		30 ppm @ 3% oxygen on a dry basis, 15 minute avg, gaseous fuel 40 ppm @ 3% oxygen on a dry basis, 15 minute avg, nongaseous fuel			
	CO		400 ppm		400 ppm		400 ppm			

Table II
Identification of Performance Standards
Source Category: Industrial Boilers

Rule/Measure	Rule/Measure				
	Santa Barbara 342	Yolo-Solano 2.27	Determination		
Exemptions	<p>1. Boilers used by electric utilities to generate electricity</p> <p>2. Process heaters, kilns, and furnaces where the products of combustion come into direct contact with the material to be heated</p> <p>3. Waste heat recovery boilers that are used to recover heat from the exhaust of combustion turbines or reciprocating internal combustion engines</p> <p>4. Equipment that does not require a permit under the provisions of SB Rule 202</p> <p>5. Boilers while forced to burn nongaseous fuel during times of natural gas curtailment. This exemption shall not exceed 168 cumulative hours of operation per calendar year excluding equipment testing time not exceeding 24 hours per calendar year.</p> <p>6. Units with permitted annual heat input of less than 9,000 million Btu which are either (a) operated in a manner that maintains stack-</p>	<p>1. Boilers used by electric utilities to generate electricity</p> <p>2. Process heaters used less than 250 hours per year</p> <p>3. Dryers in which a material is being dried while in direct contact with the products of combustion</p> <p>4. Cement and lime kilns, glass melting furnaces and smelters</p> <p>5. Waste heat recovery boilers that are used to recover heat from the exhaust of combustion turbines</p> <p>6. If gas is unavailable for purchase, units which normally burn only gas shall comply with a NOx emission limit not to exceed 0.6 lbs/mmbtu when burning nongaseous fuel according to the following equation: (lbs/mmbtu NOx emission rate)x(hours of operation per calendar year) < 36.12</p> <p>7. Units with annual heat input of less than 9,000 million Btu for each of the three previous calendar years which are either (a) operated</p>	<p>1. Boilers used by electric utilities to generate electricity</p> <p>2. Dryers in which a material is being dried while in direct contact with the products of combustion</p> <p>3. Waste heat recovery boilers that are used to recover heat from the exhaust of combustion turbines</p> <p>4. Cement and lime kilns, glass melting furnaces and smelters</p> <p>5. Units which normally burn only gas shall comply with a 150 ppm NOx emission limit when burning nongaseous fuel, if gas is unavailable for purchase. This exemption shall not exceed 168 cumulative hours of operation per calendar year excluding equipment testing time not exceeding 48 hours per calendar year.</p> <p>6. Units with annual heat input of less than 9,000 million Btu for each of the three previous calendar years which are either (a) operated in a manner that maintains</p>		

Table II
Identification of Performance Standards
Source Category: Industrial Boilers

Rule/Measure	Rule/Measure				
	Santa Barbara 342	Yolo-Solano 2.27	Determination		
	gas oxygen concentrations at less than 3.00 percent by volume on a dry basis or (b) operated with a stack-gas oxygen trim system set at 3.00 \pm 0.15 percent oxygen by volume on a dry basis or (c) tuned at least once every 12 months	in a manner that maintains stack-gas oxygen concentrations at less than or equal to 3.00 percent by volume on a dry basis or (b) tuned at least once every 12 months	stack-gas oxygen concentrations at less than or equal to 3.00 percent by volume on a dry basis or (b) operated with a stack-gas oxygen trim system set at 3.00 \pm 0.15 percent oxygen by volume on a dry basis or (c) tuned at least once every 12 months		
Applicability	Boilers, steam generators, and process heaters with rated heat inputs greater than or equal to 5 million Btu per hour used in all industrial, institutional, and commercial operations	Boilers, steam generators, and process heaters with rated heat inputs greater than or equal to 5 million Btu per hour used in all industrial, institutional, and commercial operations	Boilers, steam generators, and process heaters with rated heat inputs greater than or equal to 5 million Btu per hour used in all industrial, institutional, and commercial operations		

Table II
Identification of Performance Standards
Source Category: Industrial Boilers

Rule/Measure	Rule/Measure				
	Santa Barbara 342	Yolo-Solano 2.27	Determination		
Comments	Most districts' large boiler rules require the same performance standards. This rule was chosen because it has the fewest exemptions.	Most districts' large boiler rules require the same performance standards. This rule was chosen because it has few exemptions.	Economic impacts are the capital cost of emission control equipment and the increased operating cost associated with emission control equipment. If combustion equipment is operated with lower excess air after, or instead of, retrofitting control equipment; there will be a cost benefit due to increased thermal efficiency.		
		Pursuant to H & S section 40728.5(c), Yolo-Solano is not required to perform an assessment of the socioeconomic impacts of the adoption, amendment, or repeal of any District rule or regulation.			

Large Water Heaters and Small Boilers

South Coast Rule 1146.2 is the only rule which applies to this source category. The rule currently covers units with rated heat inputs between 400,000 and 2 million Btu per hour, and, as of the year 2000, will also cover units over the range of 75,000 to 400,000 Btu/hr.

Table I
Identification of Performance Standards
Source Category: Large Water Heaters and Small Boilers
(75,000 Btu/hour up to and including 2 million Btu/hour)

Regulated Component	Pollutant	Rule/Measure/Date							
		South Coast 1146.2, Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers Adopted 1/9/98							
		Performance Standard							
Large Water Heaters and Small Boilers	NOx	30 ppm @ 3% oxygen on a dry basis for units with rated heat input greater than 400,000 Btu/hour up to and including 2 million Btu/hr							
		x 50 ppm @ 3% oxygen on a dry basis for units with rated heat input from 75,000 Btu/hr up to and including 400,000 Btu/hr and manufactured on or after 1/1/2000							
	CO	40 ppm							

Table II
Identification of Performance Standards
Source Category: Large Water Heaters and Small Boilers

Rule/Measure	Rule/Measure				
	South Coast 1146.2				
Exemptions	1. Waste heat recovery boilers that are used to recover heat from the exhaust of combustion turbines 2. Unfired waste heat recovery boilers that are used to recover heat from the exhaust of any combustion equipment 3. Kilns or ovens used for annealing, drying, curing, baking, cooking, calcining, or vitrifying 4. Unfired waste heat recovery heaters that are used to recover heat from the exhaust of any combustion equipment 5. Units used in recreational vehicles 6. Units used in mobile homes 7. Units located at RECLAIM facilities 8. Retrofitting of residential units is not required 9. Retrofitting is not required for units that are demonstrated to use less than 900 million Btu of natural gas during every calendar				

Table II
Identification of Performance Standards
Source Category: Large Water Heaters and Small Boilers

Rule/Measure	Rule/Measure				
	South Coast 1146.2				
	year beginning with: (a) 2001 for units rated greater than 1 million Btu/hr and less than or equal to 2 million Btu/hr, and (b) 2005 for units rated greater than 400,000 Btu/hr and less than or equal to 1 million Btu/hr				

Table II
Identification of Performance Standards
Source Category: Large Water Heaters and Small Boilers

Rule/Measure	Rule/Measure				
	South Coast 1146.2				
Applicability	<p>Natural gas-fired large (commercial) water heaters, small (industrial) boilers and process heaters. The rule applies to units that have a rated heat input starting at 75,000 Btu/hr up to and including 2 million Btu/hr. Beginning 1/1/2000, the provisions of the rule are applicable to manufacturers, distributors, retailers, refurbishers, installers and operators of new units. Beginning 7/1/2002, the provisions of the rule are also applicable to operators of existing units with a rated heat input greater than 400,000 Btu/hr up to and including 2 million Btu/hr and manufactured on or after 1/1/2000.</p>				

Table II
Identification of Performance Standards
Source Category: Large Water Heaters and Small Boilers

Rule/Measure	Rule/Measure				
	South Coast 1146.2				
Comments	<p>SC 1146.2 is the only district rule in this category. The rule includes provisions for a District implementation study in cooperation with the public, industry, and trade associations. District staff will report results of the study to the District Board at least 18 months prior to the implementation date for the following categories: new units (75,000 to 400,000 Btu/hr), retrofit units (400,000 to 1 million Btu/hr), and retrofit units (1 to 2 million Btu/hr). The study will evaluate availability of low NOx burners and boilers, cost differential between standard units and low NOx units, timing of proposed retrofits, and cost-effectiveness and cost impacts on selected industries and small businesses.</p>				

Marine Coatings

Table I
Identification of Performance Standards
Source Category: Marine Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
		Ventura County APCD 74.24 (9/10/96)		BAAQMD 8-43 (12/20/95)		SCAQMD 1106 (1/13/95)		San Diego County APCD 67.18 (5/15/96)		NESHAP 60 FR 64330 (12/15/95)	
		Performance Standard									
General Coatings	VOC										
Baked		x	275 g/l	x	275 g/l	x	275 g/l	x	275 g/l		340 g/l
Air Dried			340 g/l		340 g/l		340 g/l		340 g/l		
Air Flask		x	340 g/l					x	340 g/l	x	340 g/l
Antenna		x	340 g/l				530 g/l	x	340 g/l		530 g/l
Antifoulants		x	400 g/l	x	400 g/l	x	400 g/l	x	400 g/l	x	400 g/l
Aluminum Substrate Antifoulants		x	560 g/l								
Heat Resistant											
Baked		x	360 g/l	x	360 g/l	x	360 g/l	x	360 g/l		420 g/l
Air Dried			420 g/l		420 g/l		420 g/l		420 g/l		

Table I
Identification of Performance Standards
Source Category: Marine Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
		Ventura County APCD 74.24 (9/10/96)		BAAQMD 8-43 (12/20/95)		SCAQMD 1106 (1/13/95)		San Diego County APCD 67.18 (5/15/96)		NESHAP 60 FR 64330 (12/15/95)	
		Performance Standard									
High Gloss											
Baked			360 g/l	x	275 g/l	x	275 g/l		360 g/l		420 g/l
Air Dried			420 g/l		340 g/l		340 g/l		420 g/l		
Finish Primer								x	600 g/l		
Mist Coating								x	610 g/l	x	610 g/l
Impregnating Sealer								x	700 g/l		
High Temperature		x	500 g/l	x	500 g/l	x	500 g/l	x	500 g/l	x	500 g/l
Low Activation Interior		x	420 g/l	x	420 g/l	x	420 g/l	x	420 g/l		
Military Exterior		x	340 g/l	x	340 g/l			x	340 g/l	x	340 g/l
Navigational Aids		x	340 g/l		550 g/l	x	340 g/l		550 g/l		550 g/l
Pretreatment Wash Primer			780 g/l	x	420 g/l		780 g/l	x	420 g/l		780 g/l
Repair and Maintenance Thermoplastic		x	340 g/l	x	340 g/l		550 g/l		550 g/l		550 g/l
Rubber Camouflage Coatings		x	340 g/l					x	340 g/l	x	340 g/l

Table I
Identification of Performance Standards
Source Category: Marine Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
		Ventura County APCD 74.24 (9/10/96)		BAAQMD 8-43 (12/20/95)		SCAQMD 1106 (1/13/95)		San Diego County APCD 67.18 (5/15/96)		NESHAP 60 FR 64330 (12/15/95)	
		Performance Standard									
High Solids Epoxy								x	280 g/l		
Pleasure Craft Topcoat								x	650 g/l		
Sealant for Wire Sprayed Aluminum		x	610 g/l	x	610 g/l	x	610 g/l	x	610 g/l	x	610 g/l
Special Marking		x	420 g/l		490 g/l		490 g/l	x	420 g/l		490 g/l
Speciality Interior		x	340 g/l	x	340 g/l			x	340 g/l	x	340 g/l
Tack Coat		x	610 g/l	x	610 g/l	x	610 g/l	x	610 g/l	x	610 g/l
Undersea Weapons Systems Coating											
Baked					275 g/l		275 g/l		275 g/l		
Air Dried			340 g/l	x	340 g/l	x	340 g/l	x	340 g/l		340 g/l
Wood Sealer		x	340 g/l					x	340 g/l		
Zinc Rich		x	340 g/l	x	340 g/l			x	340 g/l	x	340 g/l
Antifoulants for Pleasure Craft								x	330 g/l		

Table I
Identification of Performance Standards
Source Category: Marine Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
		Ventura County APCD 74.24 (9/10/96)		BAAQMD 8-43 (12/20/95)		SCAQMD 1106 (1/13/95)		San Diego County APCD 67.18 (5/15/96)		NESHAP 60 FR 64330 (12/15/95)	
		Performance Standard									
Extreme High Gloss											
Baked				x	420 g/l	x	420 g/l				
Air Dried					490 g/l		490 g/l				
Metallic Heat Resistant						x	530 g/l				
Elastomeric Adhesives with 15% by weight rubber						x	730 g/l				
Solvent Based Inorganic Zinc						x	650 g/l				
Preconstruction Zinc Primer								x	650 g/l	x	650 g/l
Organic Zinc								x	340 g/l		360 g/l
Primer Surfacer								x	340 g/l		
Radar Exterior Topcoat								x	340 g/l		
Non Skid										x	340 g/l
Nuclear										x	420 g/l

Table I
Identification of Performance Standards
Source Category: Marine Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
		Ventura County APCD 74.24 (9/10/96)		BAAQMD 8-43 (12/20/95)		SCAQMD 1106 (1/13/95)		San Diego County APCD 67.18 (5/15/96)		NESHAP 60 FR 64330 (12/15/95)	
		Performance Standard									
Control Equipment		x	combined control and capture efficiency must equal 85% by weight	x	total abatement efficiency must be 85%	x	capture and destruction efficiency of 85% by weight	x	combined capture and control efficiency must equal 85% by weight	x	emissions reductions from control device should equal emissions reductions from use of low VOC coatings
Surface Preparation and Clean up solvents			Clean-up solvent partial pressure < 45 mm Hg @ 20 degrees C. Surface preparation solvents must have VOC content < 200 g/l. All VOC containing materials must be stored in closed containers.		store spent solvent and cloth and paper used for solvent preparation and clean-up inclosed containers	X	store spent solvent and cloth and paper used for solvent preparation and clean-up. Solvent must have VOC contents of 70 g/l or less.		solvent used must be < 200 g/l or a boiling point of > 190 degrees C, or vapor pressure of 20 mm Hg @ 20 degrees C, or less.		
Cleaning Equipment		x	enclosed parts washer or approved alternative	x	must use equipment for minimizing evaporative losses to the atmosphere	x	facilities must use wipe cleaning, spray bottles, enclosed cleaning device, or approved clean-up equipment	x	enclosed system, or approved alternative		
Prohibition of Specification		n q	no person shall specify the use of a coating within the district if application of the coating results in a violation of the rule.	n q	no person shall specify the use of a coating within the district if application of the coating results in a violation of the rule.	n q	no person shall specify the use of a coating within the district if application of the coating results in a violation of the rule.	n q	no person shall specify the use of a coating within the district if application of the coating results in a violation of the rule.		
Compliance Statement		n	manufacturer of	n	manufacturer of	n		n	manufacturer shall	n	

Table I
Identification of Performance Standards
Source Category: Marine Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
		Ventura County APCD 74.24 (9/10/96)		BAAQMD 8-43 (12/20/95)		SCAQMD 1106 (1/13/95)		San Diego County APCD 67.18 (5/15/96)		NESHAP 60 FR 64330 (12/15/95)	
		Performance Standard									
		q	coatings shall label coating container, or MSDS with VOC content	q	coatings shall label coating container, or MSDS with VOC content	q		q	provide information on VOC content	q	
Recordkeeping		n q	- list of coatings and solvents used - mixing ratios - daily records of coatings and solvents used - control equipment operating records monthly records of noncompliant coating and solvent usage	n q	- coatings and solvents used -mixing ratios - VOC content of coatings and solvents used as applied - monthly records of: - daily coatings and solvents used - mix ratios - coating categories for each coating and solvent used -oven temperature	n q	- application method and substrate type - amount of coating and solvents used - VOC content of coatings and solvents - vapor pressure of coatings and solvents - oven temperature	n q	-coatings and solvents used - VOC content of coatings and solvents, and vapor pressure - mixing ratios -monthly records of: - coatings and solvents used - oven temp - dip tank records, if applicable	n q	- total volume of coatings and solvents used - volume of exempts used - coating categories and VOC limits - coating testing results

Table II
Identification of Performance Standards
Source Category: Marine Coatings

Rule/Measure	Rule/Measure				
	San Diego APCD 67.18	SCAQMD 1106	BAAQMD 8-43	Ventura County APCD 74.24	NESHAP
Exemptions	<ul style="list-style-type: none"> -antifoulant coatings applied to aluminum hulls, outboard motors , lower drive shafts, and aluminum running gear below waterline provided records are maintained to substantiate that the antifoulant coatings are applied to aluminum hull, outboard motors, lower drive shafts, and aluminum running gear. - noncommercial marine coating opeations performed at personal residences for the purpose of coating their own pleasure craft - marine coatings used in volumes less than 20 gal/yr, provided not more than 20 gal/yr of noncompliant coating are used 	<ul style="list-style-type: none"> - marine coatings applied to interior surfaces of potable water containers - marine coatings purchased before January 1, 1992, in containers of quart or less and applied to pleasure craft - antifoulant coatings applied to aluminum hulls 	<ul style="list-style-type: none"> - coating of pleasure craft or fishing vessels using coatings purchaed in contasiners of one gallon or less - VOC limits shall not apply to coatings used in volumes less than 20 gal/yr - antifoulant coating used on aluminum hulls 	<ul style="list-style-type: none"> - VOC limits shall not apply to to any stationary source emitting not more than 200 lsb/yr of VOC - VOC limits shall not apply if noncompliant coaitngs are not available, and total use of noncompliant coatings is less than 55 gal/yr - surface preparation and cleanup solvent requirements shall not apply provided the total volume of of noncompliant solvent use does not exceed 5 gal/yr 	<ul style="list-style-type: none"> - coatings used in volumes of less than 200 liters/yr, provided that the total volume of coating exempt from the rule does not exceed 1,000 liter/yr at any facility

Table II
Identification of Performance Standards
Source Category: Marine Coatings

Rule/Measure	Rule/Measure				
	San Diego APCD 67.18	SCAQMD 1106	BAAQMD 8-43	Ventura County APCD 74.24	NESHAP
Applicability	This rule is applicable to marine coating operations including the coating of marine and fresh water vessels, oil drilling platforms, navigational aids and component parts; and structures intended for exposure to marine environment.	This rule applies to all coating operations of boats, ships, and their appurtenances, and to buoys and oil drilling rigs intended for the marine environment.	This rule applies to the surface coating of marine vessels, components and structures intended for exposure to a marine environment, including oil drilling platforms and navigational aids.	The provisions of this rule apply to any person who applies, specifies the use of, or supplies coatings for marine and fresh water vessels, drilling vessels, and navigational aids, and their parts or components, including any parts subjected to unprotected shipboard conditions.	Rule applies to shipbuilding and ship repair operations at any facility that is a major source.
Comments					

Metal Parts and Products (Non-Architectural)

Table I
Identification of Performance Standards
Source Category: Metal Parts and Products (Non-Architectural)

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area AQMD 8-19 (12/20/95)		Sacramento Metropolitan AQMD 451 (10/2/97)		Ventura County 74.12 (9/10/96)		San Luis Obispo APCD 411 (1/10/89)		South Coast AQMD 1107 (3/8/96)	
		Performance Standard									
General Coatings	VOC										
Baked		x	275 g/l	x	275 g/l	x	275 g/l	x	275 g/l	x	275 g/l
Air Dried			340 g/l		340 g/l		340 g/l		340 g/l		340 g/l
Pretreatment Wash Primer	VOC										
Baked			420 g/l		780 g/l <u>4/1/98</u> 420 g/l	x	275 g/l		-		420 g/l
Air-Dried			420 g/l		780 g/l 420 g/l		340 g/l				420 g/l
Silicone Release	VOC										
Baked		x	420 g/l		762 g/l <u>4/1/98</u> 420 g/l	x	420 g/l	x	420 g/l	x	420 g/l
Air Dried			420 g/l		762 g/l 420 g/l		420 g/l		420 g/l		420 g/l
Extreme Performance	VOC										
Baked			420 g/l		750 g/l <u>4/1/98</u> 420 g/l	x	360 g/l	x	360 g/l	x	360 g/l
Air Dried			420 g/l		750 g/l 420 g/l		420 g/l		420 g/l		420 g/l
High Temperature	VOC										

Table I
Identification of Performance Standards
Source Category: Metal Parts and Products (Non-Architectural)

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area AQMD 8-19 (12/20/95)		Sacramento Metropolitan AQMD 451 (10/2/97)		Ventura County 74.12 (9/10/96)		San Luis Obispo APCD 411 (1/10/89)		South Coast AQMD 1107 (3/8/96)	
		Performance Standard									
Baked		x	420 g/l		-		420 g/l		720 g/l	x	420 g/l
Air Dried			420 g/l			x	420 g/l		720 g/l		420 g/l
High Performance Architectural	VOC				-						
Baked		x	420 g/l				420 g/l		750 g/l		420 g/l
Air-Dried			420 g/l			x	420 g/l		750 g/l	x	420 g/l
High Gloss	VOC										
Baked		x	360 g/l		x	360 g/l		360 g/l		x	360 g/l
Air-Dried			420 g/l		420 g/l		420 g/l		420 g/l	x	420 g/l

Table I
Identification of Performance Standards
Source Category: Metal Parts and Products (Non-Architectural)

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area AQMD 8-19 (12/20/95)		Sacramento Metropolitan AQMD 451 (10/2/97)		Ventura County 74.12 (9/10/96)		San Luis Obispo APCD 411 (1/10/89)		South Coast AQMD 1107 (3/8/96)	
		Performance Standard									
Heat Resistant	VOC										
Baked		x	360 g/l	x	360 g/l	x	360 g/l	x	360 g/l	x	360 g/l
Air-Dried			420 g/l		420 g/l		420 g/l		420 g/l		420 g/l
Metallic Topcoat	VOC										
Baked		x	360 g/l		<u>4/1/98</u> 420 g/l	x	360 g/l	x	360 g/l		420 g/l
Air-Dried			420 g/l		420 g/l		420 g/l		420 g/l		420 g/l
Solar Absorbent	VOC										
Baked		x	360 g/l	x	360 g/l	x	360 g/l	x	360 g/l	x	360 g/l
Air-Dried			420 g/l		420 g/l		420 g/l		420 g/l		420 g/l

Table I
Identification of Performance Standards
Source Category: Metal Parts and Products (Non-Architectural)

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area AQMD 8-19 (12/20/95)		Sacramento Metropolitan AQMD 451 (10/2/97)		Ventura County 74.12 (9/10/96)		San Luis Obispo APCD 411 (1/10/89)		South Coast AQMD 1107 (3/8/96)	
		Performance Standard									
Zinc-Filled Primers	VOC										
Baked		-		-		-	x	420 g/l			
Air-Dried								420 g/l		-	
Non-Skid	VOC		-								-
Baked				x	360 g/l						
Air-Dried					420 g/l						
Prefabricated Architectural Component	VOC		-								
Baked				x	<u>4/1/98</u> 275 g/l			x	275 g/l		275 g/l
Air-Dried					420 g/l				420 g/l	x	420 g/l

Table I
Identification of Performance Standards
Source Category: Metal Parts and Products (Non-Architectural)

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area AQMD 8-19 (12/20/95)		Sacramento Metropolitan AQMD 451 (10/2/97)		Ventura County 74.12 (9/10/96)		San Luis Obispo APCD 411 (1/10/89)		South Coast AQMD 1107 (3/8/96)	
		Performance Standard									
Aluminum Coatings for Window Frames and Door Frames Baked Air-Dried	VOC		-			<u>4/1/98 10/1/98</u> 750 g/l 600 g/l 420 g/l x 750 g/l 600 g/l 420 g/l					-
Etching Filler Baked Air-Dried	VOC		-		-		x 420 g/l 420 g/l		720 g/l 720 g/l		x 420 g/l 420 g/l
Vacuum Metalizing Baked Air-Dried	VOC		-		-		x 420 g/l 420 g/l		800 g/l 800 g/l		x 420 g/l 420 g/l

Table I
Identification of Performance Standards
Source Category: Metal Parts and Products (Non-Architectural)

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area AQMD 8-19 (12/20/95)		Sacramento Metropolitan AQMD 451 (10/2/97)		Ventura County 74.12 (9/10/96)		San Luis Obispo APCD 411 (1/10/89)		South Coast AQMD 1107 (3/8/96)	
		Performance Standard									
Mold Seal	VOC		-		-						
Baked						x	420 g/l		750 g/l	x	420 g/l
Air-Dried						x	420 g/l		750 g/l	x	420 g/l
Pan Baking	VOC		-		-						
Baked						x	420 g/l			x	420 g/l
Air-Dried						x	420 g/l			x	420 g/l
Laboratory Furniture	VOC		-		-						-
Baked						x	340 g/l				
Air-Dried						x	340 g/l				

Table I
Identification of Performance Standards
Source Category: Metal Parts and Products (Non-Architectural)

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area AQMD 8-19 (12/20/95)		Sacramento Metropolitan AQMD 451 (10/2/97)		Ventura County 74.12 (9/10/96)		San Luis Obispo APCD 411 (1/10/89)		South Coast AQMD 1107 (3/8/96)	
		Performance Standard									
Military Specification	VOC		-		-						
Baked								x	275 g/l	x	275 g/l
Air-Dried									340 g/l		340 g/l
Touch-Up	VOC		-		-						
Baked								x	360 g/l	x	360 g/l
Air-Dried									420 g/l		420 g/l
Camouflage	VOC										
Baked		x	360 g/l	x	360 g/l	x	360 g/l	x	360 g/l		420 g/l
Air-Dried			420 g/l		420 g/l		420 g/l		420 g/l		420 g/l

Table I
Identification of Performance Standards
Source Category: Metal Parts and Products (Non-Architectural)

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
Repair	VOC		-		-						
Baked							x	360 g/l	x	360 g/l	
Air-Dried								420 g/l		420 g/l	
Electric Insulating Varnish	VOC		-								
Baked				x	275 g/l			620 g/l		420 g/l	
Air-Dried					340 g/l			620 g/l		420 g/l	
Application Equipment		x	HVLP, electrostatic, detailing gun, or an approved equivalent method	x	roll coat, dipcoat, electrostatic, flowcoat, HVLP, LVLP, brushcoating, roller coating, or a method equivalent to the above	x	electrostatic, flowcoating, HVLP, dip coating, hand application or other method that can demonstrate 65% transfer efficiency	x	electrostatic, flow coat, dip coat, HVLP, or other approved method that can demonstrate 65% transfer efficiency	x	electrostatic, flow coat, dip coat, roll coat, HVLP, hand application, or other method capable of achieving 65% transfer efficiency

Table I
Identification of Performance Standards
Source Category: Metal Parts and Products (Non-Architectural)

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area AQMD 8-19 (12/20/95)		Sacramento Metropolitan AQMD 451 (10/2/97)		Ventura County 74.12 (9/10/96)		San Luis Obispo APCD 411 (1/10/89)		South Coast AQMD 1107 (3/8/96)	
		Performance Standard									
Control Equipment			abatement efficiency of at least 85%		overall efficiency of 85%		capture and control efficiency of 85%		emissions reductions must be equivalent to the use of low VOC coatings	x	control device must reduce emissions by at least 95% by weight, or the output of the control device is 50 ppm by volume calculated as carbon w/no dilution, and the facility demonstrates that the control device collects at least 90% by weight of the emissions generated.
Surface Preparation/Cleanup Solvent					Surface preparation solvents must have a VOC content less than 72 g/l after 10/1/98.	x	Surface preparation solvents must have VOC content of 70 g/l or less.			x	Clean-up solvent must have VOC concentration of 70 g/l or less.
Solvent Evaporative Loss Minimization		x	Closed containers for storage and disposal of solvent soaked rags, and paper. Solvent containers must be closed when not in use.	x	Closed containers for storage and disposal of solvent soaked rags, and paper. Solvent containers must be closed when not in use.	X	Closed containers for storage and disposal of solvent soaked rags, and paper. Solvent containers must be closed when not in use.	X	Closed containers for storage and disposal of solvent soaked rags, and paper. Solvent containers must be closed when not in use.	X	Closed containers for storage and disposal of solvent soaked rags, and paper. Solvent containers must be closed when not in use.

Table I
Identification of Performance Standards
Source Category: Metal Parts and Products (Non-Architectural)

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area AQMD 8-19 (12/20/95)		Sacramento Metropolitan AQMD 451 (10/2/97)		Ventura County 74.12 (9/10/96)		San Luis Obispo APCD 411 (1/10/89)		South Coast AQMD 1107 (3/8/96)	
		Performance Standard									
Recordkeeping		n q	Record coatings and solvents used. Keep weekly records of mixing ratio, amounts of coating and solvents used, speciality coatings, oven temperature, and clean-up and prep solvent used.	n q	List of materials, product information, use of coating and solvents , and control equipment records	n q	Manufacturer of coatings and solvents used, VOC contents, mixing instructions, coating categories used, coating and solvent use records. Monthly records of coating and solvent use and daily use of noncompliant coatings and solvents.	n q	amount and type of coatings and solvent used, VOC content of coating and solvents, application method used	n q	amount of coatings, coating components, solvents, and adhesives used -VOC content of coatings, coating components, solvents, and adhesives used - vapor pressure of solvents
Prohibition of Specification		n q	no person shall require or specify for use or application of a coating if it will result in a violation of the rule.	n q	-	n q	no person shall require or specify for use or application of a coating if it will result in a violation of the rule.	n q	no person shall require or specify for use or application of a coating if it will result in a violation of the rule.	N q	no person shall require or specify for use or application of a coating if it will result in a violation of the rule.

Table I
Identification of Performance Standards
Source Category: Metal Parts and Products (Non-Architectural)

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area AQMD 8-19 (12/20/95)		Sacramento Metropolitan AQMD 451 (10/2/97)		Ventura County 74.12 (9/10/96)		San Luis Obispo APCD 411 (1/10/89)		South Coast AQMD 1107 (3/8/96)	
		Performance Standard									
Compliance Statement		n q	Manufacturer shall provide on container of all coatings and solvents or accompanying MSDS, the VOC content and mixing instructions for the coating or solvent.	n q	Seller must provide coating type, VOC content, and mixing instructions.	n q	Manufacturer of coatings and solvents must provide VOC concentration, mixing instructions, and formulation information, and mixing instructions		-		-
Clean-up Equipment			Facilities shall use clean-up equipment that minimizes evaporative losses.		Enclosed cleaner or solvent with VOC content of less than 72 g/l.		Enclosed parts washer or equivalent approved method. VOC composite partial pressure must be < 45 mm Hg at 20 degrees C for cleanup solvents		Facilities shall use clean-up equipment that minimizes evaporative losses.	X	Facilities must use wipe cleaning, spray bottles, enclosed cleaning devices, or approved clean-up equipment. Solvents must have VOC content of 70 g/l or less
Stripper			-	x	200 g/l					x	200 g/l

Table II
Identification of Performance Standards
Source Category: Metal Parts and Products

Rule/Measure	Rule/Measure				
	Bay Area AQMD 8-19 (12/20/95)	Sacramento Metropolitan AQMD 451 (10/2/97)	Ventura County 74.12 (9/10/96)	San Luis Obispo APCD 411 (1/10/89)	SCAQMD 1107 (3/8/96)
Exemptions	<ul style="list-style-type: none"> - any coating used in amounts less than 20 gal/yr, Facilities using this exemption shall be limited to 100 gal/yr total coating - touch-up operations - aerosol cans - speciality coatings exemption: the rule VOC limits do not apply to the following speciality coatings, provided the VOC contents do not exceed the following, and an exemption application is filed. <p>High Performance Architectural- 750 g/l</p> <p>Pretreatment Wash Primer- 780 g/l</p> <p>Silicone Release- 700 g/l</p> <p>Extreme Performance-750 g/l</p>	<ul style="list-style-type: none"> - VOC limits do not apply if usage is less than 55 gal/yr - VOC limits do not apply for aluminum coating for window frames and door frames in volumes less than 200 gal/yr - VOC limits do not apply for pretreatment wash primer in volumes less than 200 gal/yr 	<ul style="list-style-type: none"> - total usage of noncomplying coatings does not exceed 55 gal/yr - stationary sources emitting less than 200 pounds of VOC per year from coatings, thinners, and any VOC containing product - surface preparation and cleanup requirements do not apply provided that total usage of surface cleaners is less than 5 gal/yr. 	<ul style="list-style-type: none"> - any coating used in volumes less than 20 gal/yr, provided no compliant coatings are available - pretreatment wash primer - stationary source using not more than 4 gal/day of solvent containing materials, and not more than 1 gal/hr, provided that record keeping requirements are satisfied - facilities that use control equipment -the 65% transfer efficiency requirement does not apply to metallic coatings which contain more than 30 grams of metal particles/liter of coating as applied - facilities that cannot meet the 65% transfer efficiency requirement can petition for an exemption from this provision 	<ul style="list-style-type: none"> - a facility using less than 1 gal/day - total noncompliant coating use per facility does not exceed 55 gal/yr - facilities that cannot meet the 65% transfer efficiency requirement can petition for an exemption from this provision - the 65% transfer efficiency requirement does not apply to metallic coatings which contain more than 30 grams of metal particles/liter of coating as applied, touch-up coatings, repair coatings, textured coatings, mold-seal coatings, and to facilities that use less than 3 gal/day of coating. -VOC limitations shall not apply to high performance architectural, vacuum metalizing, and/or pretreatment coatings used at

Table II
Identification of Performance Standards
Source Category: Metal Parts and Products

Rule/Measure	Rule/Measure				
	Bay Area AQMD 8-19 (12/20/95)	Sacramento Metropolitan AQMD 451 (10/2/97)	Ventura County 74.12 (9/10/96)	San Luis Obispo APCD 411 (1/10/89)	SCAQMD 1107 (3/8/96)
	High Temperature - 550 g/l Any person seeking to use these exemptions is limited to 1000 gal/yr use.				a facility which has the potential to emit a total of 10 tons or less per year of VOC, before the applicaiton of controls.
Applicability	coating of any metal part or product, except those products subject to other district rules	The provisions of this rule apply to the coating of miscellaneous metal parts and products including coating removal (stripping), surface preparation and cleanup operations by any person, as defined in the rule.	The provisions of this rule apply to any person who applies or specifies the use of surface coatings to metal parts or products.	Any person who applies or specifies the use of surface coatings to metal parts and products	This rule applies to all metal coatings operations except those performed on aerospace assembly, magnet wire, marine craft, motor vehicle, metal container, and coil coating operations.

Table II
Identification of Performance Standards
Source Category: Metal Parts and Products

Rule/Measure	Rule/Measure				
	Bay Area AQMD 8-19 (12/20/95)	Sacramento Metropolitan AQMD 451 (10/2/97)	Ventura County 74.12 (9/10/96)	San Luis Obispo APCD 411 (1/10/89)	SCAQMD 1107 (3/8/96)
Comments	<p>EPA Control Technology Guidelines for Miscellaneous Metal Parts and Products requires VOC limits of 360 g/l for baked coatings, and 420 g/l for air dried coatings. No exemptions or higher VOC limits are allowed for speciality coatings.</p> <p>Many districts have 360/420 limits for speciality coatings in their rules. However, many of these rules also have exemptions in some speciality coating categories from these limits for facilities that are not major sources. Many of these low VOC coatings are not currently feasible for all sources for economic and technical reasons.</p>				

Pleasure Craft Coating Operations

Table I
Identification of Performance Standards
Source Category: Pleasure Craft Coating Operations

Regulated Component	Pollutant	Rule/Measure/Date									
		SCAQMD 1106-1 6/13/97									
		Performance Standard									
High Gloss	VOC		420 g/l								
Extreme High Gloss	VOC		490 g/l								
Pretreatment Wash Primers	VOC		780 g/l								
Finish Primer/Surfacer	VOC		420 g/l								
High Build Primer Surfacer	VOC		340 g/l								
Teak Primer	VOC		775 g/l								
Antifoulant Coatings	VOC										
Aluminum Substrate			560 g/l								
Other Substrates			150 g/l								

Table I
Identification of Performance Standards
Source Category: Pleasure Craft Coating Operations

Regulated Component	Pollutant	Rule/Measure/Date									
		SCAQMD 1106-1 6/13/97									
		Performance Standard									
Clear Wood Finishes	VOC										
Sealers			550 g/l								
Varnishes			490 g/l								
Others			420 g/l								
Application Method			hand application, HVLP, or equivalent, approved method								
Cleaning Equipment			facilities must use wipe cleaning, spray bottles, enclosed cleaning device, or approved clean-up equipment								
Surface Preparation Solvents			70 g/l								

Table I
Identification of Performance Standards
Source Category: Pleasure Craft Coating Operations

Regulated Component	Pollutant	Rule/Measure/Date							
		SCAQMD 1106-1 6/13/97							
		Performance Standard							
Recordkeeping		<ul style="list-style-type: none"> - application method and substrate type - amount of coating and solvents used - VOC content of coatings and solvents - vapor pressure of coatings and solvents - oven temperature 							
Solvent Loss Minimization		use closed containers for storage and disposal of cleaning rags and close solvent-containing containers when not in use							

Table II
Identification of Performance Standards
Source Category: Pleasure Craft Coating Operations

Rule/Measure	Rule/Measure				
	SCAQMD 1106-1				
Exemptions	-aerosol coatings				
Applicability	This rule is applicable to all coating operations of pleasure craft, their parts, and components, for the purposes of refinishing, repairing, modification, or manufacturing such craft. This rule shall also apply to establishments engaged in activities described in the United States office of Management and Budget's 1987 Standard Industrial Classification Manual, under SIC codes 3732-Boat Building and Repairing and 4493-Marinas.				
Comments	SCAQMD only district with pleasure craft rule				

Polymeric Foam Product Manufacturing

Notes: Most districts regulate this category through their general solvent rules. Among the three districts that have rules which apply specifically to these sources, South Coast Rule 1175 has the most effective emission limits and performance requirements. However, we believe, depending on the type of foam operation, the use of lower VOC-content blowing agents, non-VOC blowing agents (or blends), or controlling emissions from more emission points in the manufacturing process could reduce VOC emissions further than are currently being achieved. Emission reductions could be realized by requiring onsite storage of the finished product for a specified time and the venting of VOC emissions from the storage area to an approved emissions control system. Where technically feasible, VOC emissions that occur during the manufacturing process, finished product storage, shipment, or consumer use could be eliminated through the use of non-VOC blowing agents.

Table I
Identification of Performance Standards
Source Category: Polymeric Foam Product Manufacturing

Regulated Component	Pollutant	Rule/Measure/Date					
		SCAQMD Rule 1175 Control of Emissions From The Manufacture of Polymeric Cellular (Foam) Products Adopted 11/3/89, Last amendment 5/13/94	SJUAPCD Rule 4682 Polystyrene Foam, Polyethylene, and Polypropylene Manufacturing Adopted 5/21/92, Last amendment 6/16/94	SDAPCD Rule 67.22 Expandable Polystyrene Foam Products Manufacturing Operations Adopted 6/7/94 Last amendment 5/15/96			
		Performance Standard					
The manufacturing steps of polymeric foam products. Not limited to expandable polystyrene (EPS), polystyrene foam extrusion, polyurethane, isocyanurate and phenolic foam operations.	VOCs, CFCs, or methylene chloride	X	All manufacturing operations (excluding EPS molding and rigid polyurethane operations) shall by January 1, 1994 discontinue its use of CFCs, VOCs, or methylene chloride. Any polymeric cellular manufacturing operations that fail to meet this requirement shall install an approved emission control system that vents all sources of manufacturing emissions to the approved emission control system. The emission collection system shall collect at least a 90 % by weight of the manufacturing emissions; & the control	Operate controllable VOC sources by one of the following methods: 1. Exclusive use of a blowing agent other than VOCs or CFC 11 or CFC 12. 2. A collection system designed to achieve at least 90 percent VOC capture efficiency, and a thermal oxidizer which abates captured VOC emissions by at least 95 percent by weight; or 3. VOC emissions are controlled by a method which achieves an emission reduction equivalent to number 2. above and does not	A person shall not manufacture EPS foam products unless: 1. VOC emissions from such manufacture do not exceed 3.0 pounds per 100 pounds of EPS raw polymeric materials used; or 2. The raw polymeric materials used for such manufacture contain no more than 3.6 percent by weight of blowing agent, as indicated in product specifications from the manufacturer of the raw polymeric material. The Calculations of VOC emissions shall be determined by multiplying the quantity of EPS foam		

Table I
Identification of Performance Standards
Source Category: Polymeric Foam Product Manufacturing

Regulated Component	Pollutant	Rule/Measure/Date						
		SCAQMD Rule 1175 Control of Emissions From The Manufacture of Polymeric Cellular (Foam) Products Adopted 11/3/89, Last amendment 5/13/94	SJUAPCD Rule 4682 Polystyrene Foam, Polyethylene, and Polypropylene Manufacturing Adopted 5/21/92, Last amendment 6/16/94	SDAPCD Rule 67.22 Expandable Polystyrene Foam Products Manufacturing Operations Adopted 6/7/94 Last amendment 5/15/96				
		Performance Standard						
		device shall reduce emissions from the emission collection system by at least 95 percent, by weight.	include the use of CFC-11 or CFC-12, & approved by the APCO.	products produced by the difference between the blowing agent content of the raw polymeric materials and that of the final EPS foam products, as determined after 24 hours of storage.				
		The owner or operator of an EPS molding operation shall submit a compliance plan that demonstrates, to the satisfaction of the Executive Officer, that manufacturing emissions and post- manufacturing emissions, assuming all the blowing agent is released from the product, are less than						

Table I
Identification of Performance Standards
Source Category: Polymeric Foam Product Manufacturing

Regulated Component	Pollutant	Rule/Measure/Date						
		SCAQMD Rule 1175 Control of Emissions From The Manufacture of Polymeric Cellular (Foam) Products Adopted 11/3/89, Last amendment 5/13/94	SJUAPCD Rule 4682 Polystyrene Foam, Polyethylene, and Polypropylene Manufacturing Adopted 5/21/92, Last amendment 6/16/94	SDAPCD Rule 67.22 Expandable Polystyrene Foam Products Manufacturing Operations Adopted 6/7/94 Last amendment 5/15/96				
		Performance Standard						
		2.4 lbs per 100 lbs of raw material processed. Failing to meet this requirement the owner or operator shall install an approved emission control system.						
Emission control system for EPS foam manufacturing operations	VOCs in SD Rule 67.22 and SJ Rule 4682 VOCs, CFCs, or methylene chloride in SC Rule 1175	X EPS Molding operations: An approved emission control system that vents all sources of manufacturing emissions to the approved emission control system. The emission collection system shall collect at least a 90 percent by weight of the manufacturing emissions; and the control device shall	A collection system designed to achieve at least 90 percent VOC capture efficiency, and a thermal oxidizer which abates captured VOC emissions by at least 95 percent by weight; or VOC emissions are controlled by a method which achieves an emission reduction equivalent to the emission control	Includes an emission collection system which captures manufacturing emissions, and transports the captured emissions to an air pollution control device; and has a combined emissions capture and control device efficiency such that VOC emissions from manufacturing operations do not exceed 3.0 pounds per				

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		Performance Standard						
			reduce emissions from the emission collection system by at least 95 percent, by weight.		system above and does not include the use of CFC-11 or CFC-12, & approved by the APCO.		100 pounds of EPS raw polymeric materials used.	
Compliance plan	VOCs, CFCs, and methylene chloride	X	yes: Demonstrate compliance with the requirements of this rule for VOCs, CFCs, and methylene chloride.		yes: Demonstrate compliance with the requirements of this rule for VOCs only.		yes: Demonstrate compliance with the requirements of this rule for VOCs only.	

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		Performance Standard					
Storage of final products	SD: VOCS SCAQMD: VOCs, CFCs, and methylene chloride	X Emissions from the final manufactured product are vented only to the approved emission control system for at least: (I) 48 hours, in the case of expandable polystyrene molding operations that process more than 800,000 pounds per calendar year of raw material; or (II) 24 hours, in the case of all other manufacturing operations.	no storage requirement on finished product		24 hours from the time after the molding of pre-expanded materials to form the final EPS foam products.		

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		Performance Standard					
Recordkeeping		Any owner or operator subject to or granted an exemption by this rule shall maintain daily record of operations, including but not limited to the amount of raw material processed, the equipment used, and the type of blowing agent used. Such records shall be retained in the operator's files for a period of two years and be available to a District representative upon request. Owners and/or operators using an emission control system as a means of complying with this rule shall maintain daily records of the operation and	Any person subject to the provisions of this rule, including exempt facilities, shall maintain records of operation, including but not limited to the amount of material processed, the equipment used, and the type of the blowing agent used. Records shall be maintained with a minimum monthly totals with the ability to calculate daily averages in any given month. Such records shall be retained for two years, and be made available upon request. Any person using an emissions control	Maintain current records of manufacturer data for the blowing agent content of EPS raw materials used. Maintain monthly records of the amount of EPS raw materials used. For control equipment, maintain daily records of the key system operating parameters, which will demonstrate continuous operation and compliance of the emission control device during periods of emission producing activities. These records shall be			

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Identification of Performance Standards
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Regulated Component	Pollutant	Rule/Measure/Date					
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Performance Standard							
recordkeeping (cont)		maintenance of the emission control system. These records shall include key system operating parameters such as temperatures, pressures, flowrates, and other measures to demonstrate compliance with the requirements of the approved emission control system, including the venting of the emissions resulting from storage of the final products.	system as a means of complying with this rule, shall maintain daily records of key system operating and maintenance procedures which will demonstrate continuous operation and compliance of the emission control device. Key system operating parameters are those necessary to ensure compliance with VOC emission requirements such as temperature, pressures, and flowrates. Such records shall be retained for two years, and be made available upon request.	retained on-site for at least three years and shall be made available to the District upon request.			

Table I
Identification of Performance Standards
Source Category: Polymeric Foam Product Manufacturing

Regulated Component	Pollutant	Rule/Measure/Date					
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		Performance Standard					
Test method for VOC content of materials	VOCs	X U.S. EPA Reference Method 24 (Code of Federal Regulations Title 40 Part 60, Appendix A.); The exempt solvent content shall be determined by SCAQMD Method 303 (Determination of Exempt Compounds) contained in the SCAQMD "Laboratory Methods of Analysis for Enforcement Samples" manual; or, SCAQMD Method 304 [Determination of Volatile Organic Compounds (VOCs) in Various Materials] contained in the SCAQMD "Laboratory Methods of Analysis for Enforcement Samples" manual.	none		Product specifications from the manufacturer of the raw polymeric material.		

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		Performance Standard								
Test Methods	exempt compounds	X	USEPA Test Method 18, or ARB Method 422 shall be used to determine emissions of exempt compounds.		EPA Method 18 or ARB Test Method 422 for determination of exempt compounds and halogenated blowing agents.					
Test method for determining the efficiency of emission control system	VOCs, CFCs, methylene chloride	X	The efficiency of the collection device shall be determined by the U.S. EPA method cited in 55 Federal Register 26865 (June 29, 1990), or any other method approved by the U.S. EPA, CARB, and the District. The efficiency of the control device and the VOC content in the control device exhaust gases, measured and calculated as carbon, shall be determined by		The control efficiency of any air pollution control equipment shall be determined using EPA Methods 25 and 25A for measuring total gaseous organic concentrations at the inlet and outlet of the control device. EPA Method 18 or ARB Test Method 422 for determination of exempt compounds and halogenated blowing agents		Measurement of VOC emission control device efficiency shall be conducted using EPA Methods 18, 25, and/or 25A (40 CFR 60, Appendix A), as they exist on June 7, 1994. Test procedures shall be performed in accordance with a protocol approved by the APCO. Measurements of capture efficiency shall be conducted using test			

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Source Category: Polymeric Foam Product Manufacturing

Regulated Component	Pollutant	Rule/Measure/Date					
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		Performance Standard					
		U.S. EPA Test Methods 25, 25A, or SCAQMD Method 25.1 (Determination of Total Gaseous Non-Methane Organic Emissions as Carbon) as applicable.		methods as provided above. Test procedures shall be performed in accordance with a protocol approved by the APCO. Subsequent to the initial compliance demonstration period, appropriate key system operating parameters as determined by the APCO may be used as indicators of the performance of the emission collection system.			

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		Performance Standard						
Test method for determining weight percent of blowing agents in expandable styrene polymers	pentanes	X SCAQMD Method 306 (Analysis of Pentanes in Expandable Styrene Polymers)			SCAQMD Method 306-9 (Analysis of Pentanes in Expandable Styrene Polymers)			
controllable manufacturing sources of emissions definitions	VOCs, &/or CFCs, &/or methylene chloride	Manufacturing Emissions are any emissions of VOC, CFC, or methylene chloride that occur during the manufacturing operation. Manufacturing Operation means every step of the processing of a polymeric material from the delivery of the raw material, until the storage of the final cellular product.	Controllable VOC Emission Sources: fluff silos or bins, reclaim extruders, condenser devolatizer vents, styrene recovery unit vents, and reclaim die hood exhausts in which materials manufactured with a VOC blowing agent are processed, or are stored, and from which emissions are vented to the atmosphere.	Manufacturing Emissions" means VOC emissions which occur during the manufacturing of EPS foam products, from the delivery of the raw polymeric materials to the manufacturing site to 24 hours after the molding of pre-expanded materials to form the final EPS foam products.				

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Source Category: Polymeric Foam Product Manufacturing

Regulated Component	Pollutant	Rule/Measure/Date					
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		Performance Standard					
VOC definition	VOCs	VOC is any volatile compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and exempt compounds	VOC means any volatile compound containing at least one atom of carbon excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonates, and exempt compounds which may be emitted to the atmosphere from EPS foam products manufacturing operations subject to this rule.	Defined in Rule 1020			

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		Performance Standard						
Raw materials (polymeric materials) and blowing agents definitions	VOCs, resins, methylene chloride, CFCs, and polymerized polymers	<u>Raw material</u> : all polystyrene beads, polyurethane, and blowing agent used in the manufacture of polymeric cellular products.	<u>Polymeric material</u> : a multi-colored compound or mixture of compounds formed by polymerization and consisting essentially of repeating structural units.	not defined				
blowing agent definition	VOCs, CFCs, and methylene chloride	Blowing agent means a liquid, gaseous or solid material that facilitates the formation of a cellular product from raw polymeric material.	Blowing Agent: any liquid, or gaseous material, including VOCs, that facilitates the formation of a cellular product from raw polymeric material.	Blowing agent means a liquid or gaseous volatile organic compound that facilitates the formation of an EPS foam product from polymeric raw materials.				

Table II
Identification of Performance Standards
Source Category: Polymeric Foam Product Manufacturing

Rule/Measure	Rule/Measure				
	SCAQMD Rule 1175 Control of Emissions From The Manufacture of Polymeric Cellular (Foam) Products Adopted 11/3/89, Last amendment 5/13/94	SJUAPCD Rule 4682 Polystyrene Foam, Polyethylene, and Polypropylene Manufacturing Adopted 5/21/92, Last amendment 6/16/94	SDAPCD Rule 67.22 Expandable Polystyrene Foam Products Manufacturing Operations Adopted 6/7/94 Last amendment 5/15/96		
Exemptions	<p>The emission control requirements of this rule shall not apply to any:</p> <p>(A) Expandable polystyrene operation that processes less than 200 pounds per day of raw material.</p> <p>(B) Rigid polyurethane operation that processes less than 1,000 pounds per day of raw material.</p> <p>The venting of emissions from the final manufactured product shall not apply to any facility that only manufactures:</p> <p>(A) rigid polyurethane foam; or</p> <p>(B) EPS foam and the highest concentration of the blowing agent in the cellular product is 1.8 percent or less by weight within 15 minutes of completion of the manufacturing operation. Verification of the concentration shall be demonstrated annually, pursuant to a protocol submitted to the District and subject to approval by the Executive Officer.</p>	<p>The provisions that require use of one of the following: A blowing agent other than a VOC or CFC 11 or CFC; or a collection system that achieves at least 90 % capture efficiency and 95% destruction efficiency; or by a method that achieves emission reductions equivalent to the collection system shall not apply to manufacturing and processing operations using polymeric materials containing less than 1 percent volatile organic compounds by weight, and not using a blowing agent in their process.</p> <p>However, the rule does not contain any provision (test methods or procedures) to verify the VOC content of polymeric materials.</p>	<p>The requirements that a person shall not manufacture EPS foam products unless VOC emissions from such manufacture do not exceed 3.0 pounds per 100 pounds of EPS raw polymeric materials used; or the raw polymeric materials used for such manufacture contain no more than 3.6 percent by weight of blowing agent, as indicated in product specifications from the manufacturer of the raw polymeric material</p> <p>shall not apply to any stationary source with uncontrolled VOC emissions of less than 50 tons per calendar year from EPS foam products manufacturing operations.</p> <p>The Calculations of VOC emissions shall be determined by multiplying the quantity of EPS foam products produced</p>		

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Rule/Measure	Rule/Measure				
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			by the difference between the blowing agent content of the raw polymeric materials and that of the final EPS foam products, as determined after 24 hours of storage.		
Applicability	This rule shall apply to polymeric cellular products manufacturing operations including but not limited to expandable polystyrene, polystyrene foam extrusion, polyurethane, isocyanurate and phenolic foam operations. All steps of the manufacturing operation and the storage of the final product for a maximum of 48 hours are subject to the requirements of this rule.	The provisions of this rule shall apply to any polystyrene foam, polyethylene, and polypropylene manufacturing and processing operations.	Except as otherwise provided in the exemptions mentioned above, this rule is applicable to any person who manufactures expandable polystyrene (EPS) foam products using volatile organic compounds (VOC's) as blowing agents. EPS foam products manufacturing operations subject to this rule shall not be subject to Rule 66.		

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Comments	Overall this rule is more effective in reducing emissions at any given manufacturing operation. All sources of manufacturing emissions are controlled by the approved emissions control device (95%, by weight) and the collection system (90%, by weight).	This rule appears to have the same emissions control system requirements as the SCAQMD Rule 1175. However, Rule 4682 does not require collection and destruction of emissions from other significant sources of emissions. Most of the emissions from these types of operations are fugitive emissions. This rule excludes a number of sources of emissions, such as storage of finished products, curing areas and others. Further, the staff report stated that all sources were in compliance with this rule prior to its adoption. Therefore, this rule has no emission reduction potential in this district.	The staff report stated this rule would only apply directly to one facility in the District. The rule proposed two options that were technically and economically feasible. One would realize an annual reduction in emissions of 81%, and the other would realize an annual reduction in emissions of 40%. The district chose the lower percent reduction option.		

Polyester Resin Operations

Notes: Several districts have adopted polyester resin operations rules that establish VOC content limitations. Determining which rule is the most stringent is difficult because: 1) different rules exempt different compounds; 2) within the same limit, different districts may use different units of measurement that are difficult to compare; 3) some districts have a general category, while other districts break the category into specific components; and 4) the applicability of each rule is not necessarily the same from district to district. Each rule should be looked at as a system of emission limits and performance requirements designed to meet the requirements of a specific district's program.

Table I (1 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date					
		Bay Area AQMD Rule 8-50 Polyester Resin Operations Last Revised 12/20/95	Colusa APCD Rule 2-37 VOC Control Measure for Polyester Resin Operations Last Revised 1/23/96	Sacramento AQMD Rule 465 Polyester Resin Operations Last Revised 2/6/97	Santa Barbara APCD Rule 349 Polyester Resin Operations Last Revised 4/27/93	South Coast AQMD Rule 1162 Polyester Resin Operations Last Revised 5/13/94	
		Performance Standard					
Compounds exempt in all rules.	VOC	Carbon monoxide Carbon dioxide Carbonic acid Metallic carbides or carbonates Ammonium carbonate Methane	Carbon monoxide Carbon dioxide Carbonic acid Metallic carbides or carbonates Ammonium carbonate Methane	Carbon monoxide Carbon dioxide Carbonic acid Metallic carbides or carbonates Ammonium carbonate Methane	Carbon monoxide Carbon dioxide Carbonic acid Metallic carbides or carbonates Ammonium carbonate Methane	Carbon monoxide Carbon dioxide Carbonic acid Metallic carbides or carbonates Ammonium carbonate Methane	Carbon monoxide Carbon dioxide Carbonic acid Metallic carbides or carbonates Ammonium carbonate Methane

Table I (1 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

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		Performance Standard					
There are approximately 20 additional compounds exempt in the following districts, unless indicated otherwise: COLAPCD SACAQMD SBAPCD SCAQMD SDAPCD SJUAPCD YSAQMD VENAPCD	VOC	Does not exempt the 20 additional compounds, exempts: acetone, parachlorobenzotrifluoride (PCBTF), cyclic, branched or linear completely methylated siloxanes (VMS), and acetone (sic).	The 20 additional compounds.	Including the following: ethane, parachlorobenzotrifluoride (PCBTF), acetone, perchloroethylene (tetrachloroethylene), 3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca), 1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb), 1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee), and cyclic, branched, or linear completely methylated siloxanes.	Including the following: Ethane, acetone, parachlorobenzotrifluoride (PCBTF), and cyclic, branched or linear completely methylated siloxanes (VMS).	Including carbon tetrachloride.	

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		Performance Standard									
General Polyester Resin Material	VOC	x	<35% by weight monomer content	x	<35% by weight monomer content	x	<35% by weight monomer content	x	<35% by weight monomer content	x	<35% by weight monomer content
Resin Containing Vapor Suppressant	VOC/ROC	x	weight loss from VOC emissions <60 g/sq. m	x	weight loss from VOC emissions <60 g/sq. m	x	weight loss from VOC emissions <60 g/sq. m	x	weight loss from ROC emissions <60 g/sq. m	x	weight loss from VOC emissions <60 g/sq. m
Closed-mold System	VOC		Yes, no limit.	x	Yes, weight loss < 4%		Yes, no limit.		Yes, no limit.	x	Yes, weight loss < 4%
High Strength Materials	VOC		None.	x	<48% monomer content by weight		None.		None.	x	<48% monomer content by weight
Specialty Resins	VOC		See corrosion-resistant materials and fire retardant materials.		See high strength materials, corrosion-resistant materials and fire retardant materials.	x	<50% monomer content by weight	x	<50% monomer content by weight		See high strength materials, corrosion-resistant materials and fire retardant materials.
Corrosion-resistant Materials	VOC		<50% monomer content by weight		<50% monomer content by weight		See Specialty Resins.		See Specialty Resins.	x	<48% monomer content by weight
Fire Retardant Materials	VOC		<50% monomer content by weight	x	<42% monomer content by weight		See Specialty Resins.		See Specialty Resins.	x	<42% monomer content by weight
Cleaning Materials	VOC		<200 g VOC/l material	x	When cleaning		Cleaning materials		None.	x	Use cleaning materials

Table I (1 of 3)
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		Performance Standard					
Cleaning Materials (continued)		Shall not use organic compounds for the clean-up of spray equipment including spray lines unless equipment for collecting the cleaning material and minimizing their evaporation to the atmosphere is used.	materials containing >1.7 lbs of VOC per gallon or having initial boiling point < 190° C exceeds 4 gallons per day, a cleaning material reclamation system with 80% efficiency shall be used. Solvent residues for the system shall be < 20% VOC by weight.	containing >1.7 lb VOC per gallon(204 gm/l), shall not be used except in enclosed gun cleaners or to clean molds, spray equipment or other dispensing equipment tools used in gel coat or specialty resin operations, provided that the cleaning materials < 4 gallons per week.		with <50 grams VOC per liter (0.42 lb VOC per gallon). A person shall use closed containers or hand held spray bottles from which solvents are applied without a propellant-induced force, cleaning equipment which has a solvent container that can be and is closed during cleaning operations, and a solvent flushing method where the cleaning solvent is discharged into a container which is closed except for solvent collection openings and the discharged solvent must be collected into containers without atomizing into the open air.	

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		Performance Standard									
Gel Coat	VOC	x	<250 g VOC per l coating applied		See clear gel coat and pigmented gel coat.		See clear gel coat and pigmented gel coat.		See clear gel coat and pigmented gel coat.		See clear gel coat and pigmented gel coat.
Clear Gel Coat	VOC		See gel coat.	x	<50% monomer content by weight	x	<50% monomer content by weight	x	<50% monomer content by weight	x	<50% monomer content by weight
Pigmented Gel Coat	VOC		See gel coat.	x	<45% monomer content by weight	x	<45% monomer content by weight	x	<45% monomer content by weight	x	<45% monomer content by weight
Alternative Emission Control Requirements (in lieu of meeting process standards)	VOC		>85% control and capture efficiency		>85% control and capture efficiency		>85% control and capture efficiency, written approval by APCO, operation under APCO approved operation and maintenance plan		>85% control and capture efficiency	x	>90% control and capture efficiency
Pultrusion Operations	VOC		None.	x	Shall have covered wet-out baths. From exit of the bath to the die, all but 18 inches of the preform distance shall be enclosed to minimize airflow. < 3% weight loss		None.		None.	x	Shall have covered wet- out baths. From exit of the bath to the die, all but 18 inches of the preform distance shall be enclosed to minimize airflow. < 3% weight loss
Surface Preparation	VOC		None.		None.		None.		None.		None.

Table I (1 of 3)
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		Performance Standard									
Spraying Operations	VOC		Use airless spray, air-assisted airless spray, electrostatic spray, high-volume/low-pressure spray.		Use airless spray, air-assisted airless spray, electrostatic spray, high-volume/low-pressure spray.		Use airless spray, air-assisted airless spray, electrostatic spray, high-volume/low-pressure spray.		Use airless spray, air-assisted airless spray, electrostatic spray, high-volume/low-pressure spray.	x	Use airless spray, air-assisted airless spray, electrostatic spray, high-volume/low-pressure spray. For touch-up and repair, a handheld air atomized spray gun with a resin container as part of the gun may be used.
Resin Baths	VOC	x	Shall be covered.		None.		None.		None.		None.
Compound Limitations	VOC		None.		None.		None.		None.		None.

Table I (1 of 3)
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Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date					
		Bay Area AQMD Rule 8-50 Polyester Resin Operations Last Revised 12/20/95	Colusa APCD Rule 2-37 VOC Control Measure for Polyester Resin Operations Last Revised 1/23/96	Sacramento AQMD Rule 465 Polyester Resin Operations Last Revised 2/6/97	Santa Barbara APCD Rule 349 Polyester Resin Operations Last Revised 4/27/93	South Coast AQMD Rule 1162 Polyester Resin Operations Last Revised 5/13/94	
		Performance Standard					
Monitoring and Records	VOC/ROC	<p>N Shall maintain list of polyester resins, catalyst, cleaning material, % VOC in polyester resin materials, and grams of VOC per liter for cleaning materials.</p> <p>For vapor suppressed resins maintain list of weight loss during polymerization, monomer % and gel time.</p> <p>Daily records of amount of polyester resin materials and cleaning materials used, volume of resin and cleaning materials used for touch-up and repair, and hours of operation and key system operating parameters.</p>	<p>N Shall maintain list of polyester resins, catalyst, cleaning material, % VOC in polyester resin materials, and grams of VOC per liter for cleaning materials.</p> <p>For vapor suppressed resins maintain list of weight loss during polymerization, monomer % and gel time.</p> <p>Records of amount of polyester resin materials and cleaning materials used, volume of resin and cleaning materials used for touch-up and repair, and record of hours of operation and key system operating parameters.</p>	<p>N Shall maintain records of type and quantity of all resins, catalysts, cleaning materials, filler material, pigment materials, and all additional additives used in resins as applied.</p> <p>Records of monomer content, in weight %, all resin materials used or stored at the facility, VOC content of all cleaning materials used and stored at the facility, and records of hours of operation and key operating parameters.</p> <p>For vapor suppressed resins maintain list of weight loss during polymerization, and amount used.</p>	<p>N Shall maintain list of polyester resins, catalyst, cleaning material, % ROC in polyester resin materials, and grams of ROC per liter for cleaning materials.</p> <p>For vapor suppressed resins maintain list of weight loss during polymerization, monomer % and gel time.</p> <p>Records of key operating parameters for each day of operation for add-on control equipment.</p> <p>All records shall be retained for the previous 24 month period.</p>	<p>N Shall maintain daily records of manufacturer's name, type and amount of each polyester resin, corrosion resistant, fire retardant, high strength materials and gel coats used, % weight of monomer, amount of VOC-containing materials, VOC content in grams/liter, for vapor suppressed resins a certificate from a resin manufacturer for each resin type, and for closed-mold and pultrusion operations the % weight loss of polyester resin materials for each application.</p> <p>Records of cleaning solvents subject to Rule 1171 shall be maintained pursuant to</p>	
Monitoring and Records							

Table I (1 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date					
		Bay Area AQMD Rule 8-50 Polyester Resin Operations Last Revised 12/20/95	Colusa APCD Rule 2-37 VOC Control Measure for Polyester Resin Operations Last Revised 1/23/96	Sacramento AQMD Rule 465 Polyester Resin Operations Last Revised 2/6/97	Santa Barbara APCD Rule 349 Polyester Resin Operations Last Revised 4/27/93	South Coast AQMD Rule 1162 Polyester Resin Operations Last Revised 5/13/94	
		Performance Standard					
(continued)		All records shall be retained for the previous 24 month period.	All records shall be retained for the previous 24 month period.	Records maintained on 1)monthly basis if total VOC emissions >5 tons/year, 2)annual basis if total VOC emissions < or equal to 5 tons/year, 3) all records shall be maintained for a continuous 3 year period. If at any time a source uses a coating which does not comply with the standardsin Section 301, daily records regarding the use and lack of use of that non-compliant resin shall be maintained.		Rule 109. Maintain daily records of all key operating parameters.	

Table I (1 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date									
		Bay Area AQMD Rule 8-50 Polyester Resin Operations Last Revised 12/20/95		Colusa APCD Rule 2-37 VOC Control Measure for Polyester Resin Operations Last Revised 1/23/96		Sacramento AQMD Rule 465 Polyester Resin Operations Last Revised 2/6/97		Santa Barbara APCD Rule 349 Polyester Resin Operations Last Revised 4/27/93		South Coast AQMD Rule 1162 Polyester Resin Operations Last Revised 5/13/94	
		Performance Standard									
Storage	VOC/ROC	x	Use closed containers for storage of all polyester resin materials, cleaning materials and any unused VOC-containing materials except when accessed for use.	x	Use closed containers for storage of all uncured polyester resin materials, cleaning materials and any unused VOC-containing materials except when accessed for use.	x	Use closed containers for storage of all polyester resin materials, cleaning materials and any unused VOC-containing materials except when accessed for use.	x	Use closed containers for storage of all polyester resin materials, cleaning materials and any unused ROC-containing materials except when accessed for use.		Use closed containers for storage of all resin materials except when accessed for use.
Disposal	VOC/ROC	x	Shall use self-closing containers for the disposal of all polyester resin materials, cleaning materials, waste materials, and any unused VOC containing materials.		Shall use self-closing containers for the disposal of all uncured polyester resin materials, cleaning materials, waste materials, and any unused VOC containing materials.		Shall use closed containers for the disposal of all uncured polyester resin materials, cleaning materials, waste materials, and any unused VOC containing materials.	x	Use closed containers for disposal of all polyester resin materials, cleaning materials and any unused ROC-containing materials except when accessed for use.		Use closed containers for disposal of all resin materials except when accessed for use.

Table I (2 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date									
		San Diego APCD Rule 67.12 Polyester Resin Operations Effective 5/15/96		Shasta AQMD Rule 3: 13 Polyester Resin Operations Last Revised 6/6/95		San Joaquin APCD Rule 4684 Polyester Resin Operations Adopted 5/19/94		Yolo Solano AQMD Rule 2.30 Polyester Resin Operations Last Revised 8/25/93		Ventura APCD Rule 74-14 Polyester Resin Material Operations Revised 5/26/92	
		Performance Standard									
Compounds exempt in all rules.	VOC		Carbon monoxide Carbon dioxide Carbonic acid Metallic carbides or carbonates Ammonium carbonate Methane		Carbon monoxide Carbon dioxide Carbonic acid Metallic carbides or carbonates Ammonium carbonate Methane		Carbon monoxide Carbon dioxide Carbonic acid Metallic carbides or carbonates Ammonium carbonate Methane		Carbon monoxide Carbon dioxide Carbonic acid Metallic carbides or carbonates Ammonium carbonate Methane		Carbon monoxide Carbon dioxide Carbonic acid Metallic carbides or carbonates Ammonium carbonate Methane
There are approximately 20 additional compounds exempt in the following districts, unless indicated otherwise: COLAPCD SACAQMD SBAPCD SCAQMD SDAPCD SJUAPCD YSAQMD VENAPCD	VOC		Including the following: perchloroethylene (tetrachloroethylene), acetone, ethane, 1-chloro-4-trifluoromethyl benzene (parachlorobenzotrifluoride, PCBTF, and cyclic, branched, or linear completely methylated siloxanes (VMS).		Does not exempt the 20 additional compounds.		Including the following: ethane, acetone, parachlorobenzotrifluoride, and cyclic, branched, or linear completely methylated siloxane compounds.		The 20 additional compounds.		Including the following: cyclic, branched, or linear completely methylated siloxanes (VMS).
General Polyester Resin Material	VOC	x	<35% by weight monomer content	x	<35% by weight monomer content	x	<35% by weight monomer content	x	<35% by weight monomer content	x	<35% by weight monomer content

Table I (2 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date									
		San Diego APCD Rule 67.12 Polyester Resin Operations Effective 5/15/96		Shasta AQMD Rule 3: 13 Polyester Resin Operations Last Revised 6/6/95		San Joaquin APCD Rule 4684 Polyester Resin Operations Adopted 5/19/94		Yolo Solano AQMD Rule 2.30 Polyester Resin Operations Last Revised 8/25/93		Ventura APCD Rule 74-14 Polyester Resin Material Operations Revised 5/26/92	
		Performance Standard									
Resin Containing Vapor Suppressant	VOC	x	weight loss from VOC emissions < 60 g/sq. m	x	weight loss from VOC emissions < 60 g/sq. m	x	weight loss from VOC emissions < 60 g/sq. m	x	weight loss from VOC emissions < 60 g/sq. m	x	weight loss from ROC emissions <60 g/sq. m
Closed-mold System	VOC		Yes, no limit.		Yes, no limit.		Yes, no limit.		Yes, no limit.		Yes, no limit.
High Strength Materials	VOC		None.	x	<48% monomer content by weight		None.		None.		See Specialty Resins.
Specialty Resins	VOC		See corrosion-resistant materials and fire retardant materials.	x	<50% monomer content by weight	x	Use low VOC with < 50% monomer content by weight	x	Use low VOC with < 50% monomer content by weight	x	<50% monomer content by weight
Corrosion-resistant Materials	VOC		<50% monomer content by weight	x	<48% monomer content by weight		See Specialty Resins.		See Specialty Resins.		See Specialty Resins.
Fire Retardant Materials	VOC		<50% monomer content by weight	x	<42% monomer content by weight		See Specialty Resins.		See Specialty Resins.		See Specialty Resins.
Cleaning Materials	VOC	x	A VOC reclamation system shall be used unless the materials contain < 1.7 lb VOC per gallon (200 gm/l), or the materials have	x	When cleaning materials containing >1.7 lbs of VOC per gallon or having initial boiling point < 190° C exceeds 4 gallons per	x	Cleaning materials containing > 1.7 lb VOC/gallon shall not be used except; 1)in enclosed equipment cleaners; or	x	When cleaning materials containing >1.7 lbs of VOC per gallon or having initial boiling point < 190° C exceeds 4 gallons per	x	When cleaning materials containing >1.7 lbs of ROC per gallon or having initial boiling point < 190° C exceeds 15 gallons per calendar
Cleaning Materials (continued)											

Table I (2 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date									
		San Diego APCD Rule 67.12 Polyester Resin Operations Effective 5/15/96		Shasta AQMD Rule 3: 13 Polyester Resin Operations Last Revised 6/6/95		San Joaquin APCD Rule 4684 Polyester Resin Operations Adopted 5/19/94		Yolo Solano AQMD Rule 2.30 Polyester Resin Operations Last Revised 8/25/93		Ventura APCD Rule 74-14 Polyester Resin Material Operations Revised 5/26/92	
		Performance Standard									
			initial boiling points > 190°C or the combined usage of materials not complying with either condition is < 0.5 gallons average per operating day calculated from monthly monitoring records. Solvent residue from reclamation system shall contain < or equal to 20% VOC by weight.		day, a cleaning material reclamation system with >80% efficiency shall be used. Solvent residues for the system shall be < 20% VOC by weight.		2)to clean molds, spray equipment or other dispensing equipment tools used in gel coat or specialty resin operations provided that the use of cleaning materials <4 gallons/day.		day, a cleaning material reclamation system with >80% efficiency shall be used. Solvent residues for the system shall be < 20% VOC by weight.		week, a reclamation system shall be used. Residues for the system shall be < 20% ROC by weight.
Gel Coat	VOC		See clear gel coat and pigmented gel coat.		See clear gel coat and pigmented gel coat.		See clear gel coat and pigmented gel coat.		Use low VOC with < 45% monomer content by weight (treated as pigmented gel coat due to clear gel coat standard)		See clear gel coat and pigmented gel coat.
Clear Gel Coat	VOC	x	<50% monomer content by weight	x	<50% monomer content by weight	x	Use low VOC with < 50% monomer content by weight	x	Use low VOC with < 50% monomer content by weight	x	<50% monomer content by weight
Pigmented Gel Coat	VOC	x	<45% monomer content by weight	x	<45% monomer content by weight	x	Use low VOC with < 45% monomer content		See Gel Coat.	x	<45% monomer content by weight

Table I (2 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date									
		San Diego APCD Rule 67.12 Polyester Resin Operations Effective 5/15/96		Shasta AQMD Rule 3: 13 Polyester Resin Operations Last Revised 6/6/95		San Joaquin APCD Rule 4684 Polyester Resin Operations Adopted 5/19/94		Yolo Solano AQMD Rule 2.30 Polyester Resin Operations Last Revised 8/25/93		Ventura APCD Rule 74-14 Polyester Resin Material Operations Revised 5/26/92	
		Performance Standard									
							by weight				
Alternative Emission Control Requirements (in lieu of meeting process standards)	VOC		None.		>85% control and capture efficiency		>85% control and capture efficiency		>85% control and capture efficiency		>85% control and capture efficiency
Pultrusion Operations	VOC		None.		None.		None.		None.		None.

Table I (2 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date					
		San Diego APCD Rule 67.12 Polyester Resin Operations Effective 5/15/96	Shasta AQMD Rule 3: 13 Polyester Resin Operations Last Revised 6/6/95	San Joaquin APCD Rule 4684 Polyester Resin Operations Adopted 5/19/94	Yolo Solano AQMD Rule 2.30 Polyester Resin Operations Last Revised 8/25/93	Ventura APCD Rule 74-14 Polyester Resin Material Operations Revised 5/26/92	
		Performance Standard					
Surface Preparation	VOC	x Conduct all dry sanding, grinding and cutting operations of polyester resin which contains fiberglass either inside a controlled enclosure or using a controlled process. For marine vessel repair operations this requirement shall apply only for sanding, grinding or cutting operations conducted on the exterior of a vessel hull. Excludes portable drilling operations.	None.	None.	None.	None.	

Table I (2 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date									
		San Diego APCD Rule 67.12 Polyester Resin Operations Effective 5/15/96		Shasta AQMD Rule 3: 13 Polyester Resin Operations Last Revised 6/6/95		San Joaquin APCD Rule 4684 Polyester Resin Operations Adopted 5/19/94		Yolo Solano AQMD Rule 2.30 Polyester Resin Operations Last Revised 8/25/93		Ventura APCD Rule 74-14 Polyester Resin Material Operations Revised 5/26/92	
		Performance Standard									
Spraying Operations	VOC		Use airless spray, air-assisted airless spray, electrostatic spray, high-volume/low-pressure spray.		Use airless spray, air-assisted airless spray, electrostatic spray, high-volume/low-pressure spray.		Use airless spray, air-assisted airless spray, electrostatic spray, high-volume/low-pressure spray.		Use airless spray, air-assisted airless spray, electrostatic spray, high-volume/low-pressure spray.		Use airless spray, air-assisted airless spray, electrostatic spray, high-volume/low-pressure spray.
		x	For touch-up and repair, a handheld air atomized spray gun with a resin container as part of the gun may be used.						x	For touch-up and repair, a handheld air atomized spray gun with a resin container of no more than one quart capacity as part of the gun may be used.	
Resin Baths	VOC		None.		None.		None.		None.		None.

Table I (2 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date					
		San Diego APCD Rule 67.12 Polyester Resin Operations Effective 5/15/96	Shasta AQMD Rule 3: 13 Polyester Resin Operations Last Revised 6/6/95	San Joaquin APCD Rule 4684 Polyester Resin Operations Adopted 5/19/94	Yolo Solano AQMD Rule 2.30 Polyester Resin Operations Last Revised 8/25/93	Ventura APCD Rule 74-14 Polyester Resin Material Operations Revised 5/26/92	
		Performance Standard					
Compound Limitations	VOC	<p>Not use a polyester resin or cleaning material subject to this rule that, after December 4, 1990, was newly formulated to contain or reformulated to increase the content of, methylene chloride, CFC-11, CFC-12, CFC-113, CFC-114 or CFC-115.</p> <p>A person shall not sell or, offer for sale, a polyester resin or cleaning material subject to this rule that, after December 4, 1990, was newly formulated to contain or reformulated to increase the content of, methylene chloride, CFC-11, CFC-12, CFC-113, CFC-114 or CFC-115.</p>	None.	None.	<p>A person shall not specify the use of any gel coat or polyester resin material subject to the provisions of this rule that does not meet the limits and requirements of this rule where such applications result in a violation of this rule. The requirements of this Section shall apply to all written or oral contracts.</p> <p>A person shall not sell or offer for sale any gel coat or polyester resin material subject to the provisions of this rule that does not meet the limits and requirements of this rule where such applications result in a violation of this rule.</p>	None.	
Compound Limitations							

Table I (2 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date					
		San Diego APCD Rule 67.12 Polyester Resin Operations Effective 5/15/96	Shasta AQMD Rule 3: 13 Polyester Resin Operations Last Revised 6/6/95	San Joaquin APCD Rule 4684 Polyester Resin Operations Adopted 5/19/94	Yolo Solano AQMD Rule 2.30 Polyester Resin Operations Last Revised 8/25/93	Ventura APCD Rule 74-14 Polyester Resin Material Operations Revised 5/26/92	
		Performance Standard					
(continued)		A person shall not manufacture, sell, offer for sale, or supply any coating or cleaning materials for use in polyester resin operations unless polyester resin or cleaning material container displays the content of methylene chloride, CFC-11), dichlorodifluoromethane (CFC-12), trichlorotrifluoroethane (CFC-113), dichlorotetrafluoroethane (CFC-114), or chloropentafluoroethane (CFC-115).					

Table I (2 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date					
		San Diego APCD Rule 67.12 Polyester Resin Operations Effective 5/15/96	Shasta AQMD Rule 3: 13 Polyester Resin Operations Last Revised 6/6/95	San Joaquin APCD Rule 4684 Polyester Resin Operations Adopted 5/19/94	Yolo Solano AQMD Rule 2.30 Polyester Resin Operations Last Revised 8/25/93	Ventura APCD Rule 74-14 Polyester Resin Material Operations Revised 5/26/92	
		Performance Standard					
Monitoring and Records	VOC	N Q Maintain current records of polyester resin materials and gel coats used, which provides manufacturer identification, material specifications, monomer content, content of any catalysts, fillers, and/or diluents, including thinners, and type of each resin or gel coat. Also maintain records of content of methylene chloride, CFC-11, CFC-12, CFC-113, CFC-114, CFC-115 contained in any polyester resin material or cleaning material used. For vapor suppressed resins maintain records showing manufacturer's information on the weight loss during polymerization.	N Q Shall maintain list of polyester resins, catalyst, cleaning material, % monomer in each polyester resin materials, and grams of VOC per liter for cleaning materials. For vapor suppressed resins maintain list of weight loss (gm/sq. m) during polymerization, monomer % and gel time. Records of amount of polyester resin materials and cleaning materials used, volume of resin and cleaning materials used for touch-up and repair, and record of hours of operation and key system operating parameters.	N Q Daily records of the type and quantity of all resins, catalysts, and cleaning materials used. Records of VOC content, % weight, all polyester resin materials used or stored at the facility, VOC content of all cleaning materials used and stored at the facility, hours of operation, and key operating parameters for any add-on control equipment. For vapor suppressed resins maintain list of weight loss (gm/sq. m) during polymerization. All records shall be retained for the	N Q Shall maintain list of polyester resins, catalyst, cleaning material, % VOC in polyester resin materials, and grams of VOC per liter for cleaning materials. For vapor suppressed resins maintain list of weight loss during polymerization, monomer % and gel time. Daily records of amount of polyester resin materials and cleaning materials used, volume of resin and cleaning materials used for touch-up and repair, and hours of operation and key system operating parameters.	N Q Weekly reports of the manufacturer and product number of each polyester resin material and cleaning material used, amount of cleaning material both used and reclaimed or recycled, and the application method for each polyester resin and cleaning material used. Records of emission rate of each polyester resin material used, as either the ROC loss rate in grams/sq. m or as % monomer content, gel time, and ROC content in lb ROC per gallon of cleaning material. Daily reports of control efficiency monitoring information, and the quantity and type of polyester resin material	
Monitoring and Records (continued)							

Table I (2 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date					
		San Diego APCD Rule 67.12 Polyester Resin Operations Effective 5/15/96	Shasta AQMD Rule 3: 13 Polyester Resin Operations Last Revised 6/6/95	San Joaquin APCD Rule 4684 Polyester Resin Operations Adopted 5/19/94	Yolo Solano AQMD Rule 2.30 Polyester Resin Operations Last Revised 8/25/93	Ventura APCD Rule 74-14 Polyester Resin Material Operations Revised 5/26/92	
		Performance Standard					
		Maintain daily records of manufacturer's identification and amount of each polyester resin material and cleaning material used. Retain records for at least 3 years.	All records shall be retained for the previous 24 month period.	previous 24 month period.	All records shall be retained for the previous 24 month period.	used. All records shall be retained for the previous 24 month period.	
Storage	VOC	Use self-closing containers for all polyester resin, VOC containing cleaning materials and solvent-laden rags including waster materials except when accessed for use.	Use closed containers for storage of all uncured polyester resin materials, cleaning materials and any unused VOC-containing materials except when accessed for use.	x Use closed containers for storage of all polyester resin materials, cleaning materials or other VOC-containing materials except when accessed for use.	x Use closed containers for storage of all polyester resin materials, cleaning materials and any unused VOC-containing materials except when accessed for use.	Use closed containers for storage of all materials containing reactive organic compounds, used or unused, including but not limited to semi-solid or liquid polyester resin materials and solid or liquid cleaning materials.	

Table I (2 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date									
		San Diego APCD Rule 67.12 Polyester Resin Operations Effective 5/15/96		Shasta AQMD Rule 3: 13 Polyester Resin Operations Last Revised 6/6/95		San Joaquin APCD Rule 4684 Polyester Resin Operations Adopted 5/19/94		Yolo Solano AQMD Rule 2.30 Polyester Resin Operations Last Revised 8/25/93		Ventura APCD Rule 74-14 Polyester Resin Material Operations Revised 5/26/92	
		Performance Standard									
Disposal	VOC		See storage.		Use self-closing containers for the disposal of all uncured polyester resin materials, cleaning materials, waste materials, and any unused VOC containing materials.		Use self-closing containers for the disposal of all uncured polyester resin materials, cleaning materials, or any unused VOC containing materials.	x	Use self-closing containers for the disposal of all polyester resin materials, cleaning materials, waste materials, and any unused VOC containing materials.		See storage.

Table I (3 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date									
		Determination of RACT/BARCT for Polyester Resin Operations CARB 1/8/91									
		Performance Standard									
Compounds exempt in all rules.	VOC	Carbon monoxide Carbon dioxide Carbonic acid Metallic carbides or carbonates Ammonium carbonate Methane									

Table I (3 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date						
		Determination of RACT/BARCT for Polyester Resin Operations CARB 1/8/91						
		Performance Standard						
There are approximately 20 additional compounds exempt in the following districts, unless indicated otherwise: COLAPCD SACAQMD SBAPCD SCAQMD SDAPCD SJUAPCD YSAQMD VENAPCD		Some of the 20 compounds are not exempt, which includes the following: 2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124), 1,1,1-trifluoroethane (HFC-143a), 1,1-difluoroethane (HFC-152a), and saturated perfluorocarbons containing sulfur with sulfur bonds only to carbon and fluorine, cyclic, branched, or linear completely fluorinated alkanes, ethers with no unsaturations, and tertiary amines with no unsaturations.						

Table I (3 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date									
		Determination of RACT/BARCT for Polyester Resin Operations CARB 1/8/91									
		Performance Standard									
General Polyester Resin Material	VOC	x	<35% by weight monomer content								
Resin Containing Vapor Suppressant	VOC	x	weight loss from VOC emissions < 60 g/sq. m								
Closed-mold System	VOC		Yes, no limit.								
High Strength Materials	VOC		See Specialty Resins.								
Specialty Resins	VOC	x	<50% monomer content by weight								
Corrosion-resistant Materials	VOC		See Specialty Resins.								
Fire Retardant Materials	VOC		See Specialty Resins.								

Table I (3 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date									
		Determination of RACT/BARCT for Polyester Resin Operations CARB 1/8/91									
		Performance Standard									
Cleaning Materials	VOC		When cleaning materials containing >1.7 lbs of VOC per gallon or having initial boiling point < 190° C exceeds 4 gallons per day, a cleaning material reclamation system with >80% efficiency shall be used. Solvent residues for the system shall be < 20% VOC by weight.								
Gel Coat	VOC		See clear gel coat and pigmented gel coat.								
Clear Gel Coat	VOC	x	<50% monomer content by weight								
Pigmented Gel Coat	VOC	x	<45% monomer content by weight								

Table I (3 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date									
		Determination of RACT/BARCT for Polyester Resin Operations CARB 1/8/91									
		Performance Standard									
Alternative Emission Control Requirements (in lieu of meeting process standards)	VOC		>85% control and capture efficiency								
Pultrusion Operations	VOC		None.								
Surface Preparation	VOC		None.								
Spraying Operations	VOC		Use airless spray, air-assisted airless spray, electrostatic spray, high-volume/low-pressure spray.								
Resin Baths	VOC		None.								
Compound Limitations	VOC		None.								
Monitoring and Records	VOC	N	Shall maintain list of polyester resins, catalyst, cleaning material, % VOC in polyester resin materials, and grams of VOC per liter for cleaning materials.								
Monitoring and Records (continued)		Q									

Table I (3 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date					
		Determination of RACT/BARCT for Polyester Resin Operations CARB 1/8/91					
		Performance Standard					
		<p>For vapor suppressed resins maintain list of weight loss during polymerization, monomer % and gel time.</p> <p>Daily records of amount of polyester resin materials and cleaning materials used, and volume of resin and cleaning materials used for touch-up and repair.</p> <p>Retain all records for the previous 24 month period.</p>					

Table I (3 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Regulated Component	Pollutant	Rule/Measure/Date							
		Determination of RACT/BARCT for Polyester Resin Operations CARB 1/8/91							
		Performance Standard							
Storage	VOC	Use closed containers to store all polyester resin materials, cleaning materials, and any unused VOC-containing materials, and scrap materials resulting from cutting and grinding of freshly cured resins except when accessed for use.							
Storage (continued)									
Disposal	VOC	Use self-closing containers for disposal of all uncured polyester resin materials, cleaning materials, waste materials, and any un-used VOC-containing materials.							

Table II (1 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Rule/Measure	Rule/Measure				
	BAAQMD Rule 8-50 Polyester Resin Operations Last Revised 12/20/95	ColAPCD Rule 2-37 VOC Control Measure for Polyester Resin Operations Last Revised 1/23/96	SACAQMD Rule 465 Polyester Resin Operations Last Revised 2/6/97	SBAPCD Rule 349 Polyester Resin Operations Last Revised 4/27/93	SCAQMD Rule 1162 Polyester Resin Operations Last Revised 5/13/94
Exemptions	Touch-up and repair are exempt from process requirements of 8-50-301.	Touch-up and repair are exempt from process requirements of section 3.	Only record keeping requirements apply when the volume of polyester resin materials used is < 20 gallons/month.	Addition or use of styrene provided that <50 gallons/calendar year is used. However, must maintain records of total styrene used per calendar year.	None.
Applicability	Manufacturing of products using polyester resins.	All commercial, military, and industrial sources performing polyester resin operations.	Persons who operate polyester resin operations within Sacramento County.	All commercial and industrial polyester resin operations.	All polyester resin operations that fabricate, rework, repair, or touch-up products for commercial, military, or industrial use.
Comments		Has the same compound exemptions as Yolo Solano 2.30.		This rule applies to ROC, which in the comparisons was assumed to be equivalent to VOC. Has the same compound exemptions as San Joaquin 4684.	

Table II (2 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Rule/Measure	Rule/Measure				
	SDAPCD Rule 67.12 Polyester Resin Operations Effective 5/15/96	SHAAQMD Rule 3: 13 Polyester Resin Operations Last Revised 6/6/95	SJUAPCD Rule 4684 Polyester Resin Operations Adopted 5/19/94	YSAQMD Rule 2.30 Polyester Resin Operations Last Revised 8/25/93	VENAPCD Rule 74-14 Polyester Resin Material Operations Revised 5/26/92
Exemptions	Any polyester resin operations where the combined consumption of polyester resins, including corrosion resistant resin, fire retardant resin, gel coat, and cleaning materials is < 1 gallon/operating day. Any marine vessel repair operations where the combined consumption of polyester resins, including corrosion resistant resin, fire retardant resin, gel coat, and cleaning materials is < 0.5 gallon/operating day. Any coating subject to Rules 67.3, 67.0 or 67.11.	Touch-up and repair are exempt from Section 300 Standards.	The provisions of this rule, other than the recordkeeping requirements of section 6.1, shall not apply to any polyester resin operation provided the volume of polyester resin materials used is less than 20 gallons/month.	The provisions of Section 300 Standards shall not apply to touch-up and repair.	Any polyester resin operations subject to the requirements of this Rule shall be exempt from the requirements of Rule 66, with the exception of Rule 66.A.7. The provisions of Section B Requirements of this rule shall not apply to stationary sources using less than 20 gallons/month of polyester resin material.
Applicability	Polyester resin operations.	All commercial and industrial stationary sources performing polyester resin operations.	All commercial and industrial polyester resin operations.	All commercial and industrial stationary sources performing polyester resin operations.	Mmanufacture of products from or the use of polyester resin material.

Table II (2 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Rule/Measure	Rule/Measure				
	SDAPCD Rule 67.12 Polyester Resin Operations Effective 5/15/96	SHAAQMD Rule 3: 13 Polyester Resin Operations Last Revised 6/6/95	SJUAPCD Rule 4684 Polyester Resin Operations Adopted 5/19/94	YSAQMD Rule 2.30 Polyester Resin Operations Last Revised 8/25/93	VENAPCD Rule 74-14 Polyester Resin Material Operations Revised 5/26/92
Comments		Has the least amount of compound exemptions.	Has the same compound exemptions as Santa Barbara 349.	Has the same compound exemptions as Colusa 2-37.	This rule applies to ROC, which in the comparisons was assumed to be equivalent to VOC.

Table II (3 of 3)
Identification of Performance Standards
Source Category: Polyester Resin Operations

Rule/Measure	Rule/Measure				
	Determination of RACT/BARCT for Polyester Resin Operations CARB 1/8/91				
Exemptions	Touch-up and repair are exempt from meeting the Standards.				
Applicability	Commercial and industrial polyester resin operations				
Comments					

Portland Cement Kilns

Table I
Identification of Performance Standards
Source Category: Portland Cement Kilns

Regulated Component	Pollutant	Rule/Measure/Date									
		Amador, Rule 211 Process Weight per Hour		Kern, Rule 425.3 Portland Cement Kilns (Oxides of Nitrogen) Adopted 10/13/94		Mojave, Rule 1161 Portland Cement Kilns Adopted: June 28, 1995		South Coast, Rule 1112 Emissions of Oxides of Nitrogen from Cement Kilns Last Revised June 6, 1986		South Coast, Rule 1112.1 Emissions of Particulate Matter from Cement Kilns Last Revised Feb 7, 1986	
		Performance Standard									
Portland cement kiln	PM		0.30 lb/ton of dry kiln feed, exclusive of fuel charged (note: this rule is more stringent than SCAQMD Rule 1112.1 until 100 tph kiln feed)							0.40 lb/ton of kiln feed for kiln feed rates less than 75 tons./hr; 30 lb/hr for kiln feed rates of 75 tons/hr or more	
Preheater-Precalciner Kilns	NOx					6.4 lbs/ton of clinker produced when averaged over any 30 consecutive day period					
Long Dry Kilns	NOx					6.4 lbs/ton of clinker produced when averaged over any 30 consecutive day period					
Short Dry Kilns	NOx					7.2 lbs/ton of clinker produced when averaged over any 30 consecutive day period					

Table I
Identification of Performance Standards
Source Category: Portland Cement Kilns

Regulated Component	Pollutant	Rule/Measure/Date									
		Amador, Rule 211 Process Weight per Hour		Kern, Rule 425.3 Portland Cement Kilns (Oxides of Nitrogen) Adopted 10/13/94		Mojave, Rule 1161 Portland Cement Kilns Adopted: June 28, 1995		South Coast, Rule 1112 Emissions of Oxides of Nitrogen from Cement Kilns Last Revised June 6, 1986		South Coast, Rule 1112.1 Emissions of Particulate Matter from Cement Kilns Last Revised Feb 7, 1986	
		Performance Standard									
Portland cement kilns	NOx			x	11.6 lbs/ton of clinker produced when averaged over any 24 consecutive hour period, and 6.4 lbs/ton of clinker produced when averaged over any 30 consecutive day period			x	11.6 lbs/ton of clinker produced when averaged over any 24 consecutive hour period, and 6.4 lbs/ton of clinker produced when averaged over any 30 consecutive day period		

Table II
Identification of Performance Standards
Source Category: Portland Cement Kilns

Rule/Measure	Rule/Measure				
	Amador, Rule 211 Process Weight per Hour	Kern, Rule 425.3 Portland Cement Kilns (Oxides of Nitrogen) Adopted 10/13/94	Mojave, Rule 1161 Portland Cement Kilns Adopted: June 28, 1995	South Coast, Rule 1112 Emissions of Oxides of Nitrogen from Cement Kilns Last Revised June 6, 1986	South Coast, Rule 1112.1 Emissions of Particulate Matter from Cement Kilns Last Revised Feb 7, 1986
Exemptions	any source category not specifically mentioned	startup, shutdown, and breakdown	startup, shutdown, and breakdown		
Applicability	These are specific limits for source exempt from Rule 212	Portland cement kilns	all existing Portland cement kilns operated within the Federal Ozone Non-Attainment Area of the Mojave Desert Air Quality Management District	gray cement kilns	cement kilns
Comments	Same limits found in other Mountain Counties districts				

Refinery Boilers

Table I
Identification of Performance Standards
Source Category: Refinery Boilers

Regulated Component	Pollutant	Rule/Measure/Date									
		SCAQMD 1109, Ems. Of No _x From Boilers & Process Heaters, Rev: 8/5/88		BAAQMD 9-10, NO _x and CO From Boilers, Steam Generators and Process Heaters in Petroleum Refineries. Rev: 1/5/94							
		Performance Standard									
Refinery boilers, steam generators and process heaters	NO _x	x	0.03 lb/MMbtu refinery wide		0.033 lb/MMbtu refinery-wide, operating day avg						
CO Boilers	NO _x				150 ppm @ 3% oxygen or 50% control, operating day avg.						
Clean fuel facility	NO _x				.033 lb/MMBtu avg refinery-wide 50% of total heat impact capacity has to meet by 7/1/2000, 100% by 7/1/2002						
Refinery boilers, steam generators and process heaters	CO			x	400 ppm @ 3% oxygen, avg per day						

Table II
Identification of Performance Standards
Source Category: Refinery Boilers

Rule/Measure	Rule/Measure				
	SCAQMD 1109	BAAQMD 9-10			
Exemptions	units less than or equal to 40 MMBtu/hr, sulfur plant reaction boilers, units operated at less than 10% capacity	boilers, steam generators, and process heaters with rated heat input less than 10 MMBtu/hr if fired exclusively with natural gas, lpg, or any combination thereof; or less than 1 MMBtu/hr if fired with any other fuel; or used in processing hydrogen sulfide process flue gas in sulfur recovery plants and their tail-gas treating units, or sulfuric acid manufacturing plants; or fired on non-gaseous fuel when natural gas is unavailable for use; waste heat recovery boilers used in conjunction with gas turbines or reciprocating internal combustion			
Applicability	boilers, steam generators, and process heaters in petroleum refineries	boilers, steam generators, and process heaters in petroleum refineries			

Table II
Identification of Performance Standards
Source Category: Refinery Boilers

Rule/Measure	Rule/Measure				
	SCAQMD 1109	BAAQMD 9-10			
Comments	Using combustion modifications can sometimes lead to increased CO emissions. The boiler can be adjusted to prevent a large increase in CO. BAAQMD Rule 9-10 limits CO emissions. This rule does not control CO.				

Restaurants, Chain-Driven Charbroilers

Table I
Identification of Performance Standards
Source Category: Restaurants, Chain-Driven Charbroilers

Regulated Component	Pollutant	Rule/Measure/Date							
		South Coast 1138, Control of Emissions from Restaurant Operations, adopted 11/14/97 ¹							
		Performance Standard							
Install control device equal to or more effective than catalytic oxidizer	VOC	x	Greater than or equal to 83% reduction in VOC (Rule 1138 and Protocol-Determination of Particulate and Volatile Organic Compound Emissions from Restaurant Operations, 11/14/97)						
Install control device equal to or more effective than catalytic oxidizer	PM _{2.5}	x	Greater than or equal to 83% reduction in PM (Rule 1138 and Protocol-Determination of Particulate and Volatile Organic Compound Emissions from Restaurant Operations, 11/14/97)						

Table I
Identification of Performance Standards
Source Category: Restaurants, Chain-Driven Charbroilers

Regulated Component	Pollutant	Rule/Measure/Date									
		South Coast 1138, Control of Emissions from Restaurant Operations, adopted 11/14/97 ¹									
		Performance Standard									
Existing chain-driven charbroiler	VOC, PM	x	Charbroiler/catalytic oxidizer tested and certified by the Executive Officer, or equipment that is equal to or more effective than catalytic oxidizer in reducing PM and VOC emissions and certified by Executive Officer								
Existing chain-driven charbroiler with permitted control equipment	VOC, PM	x	May maintain equipment for duration of its functional life, not to exceed 10 years from 11/14/97								

Table I
Identification of Performance Standards
Source Category: Restaurants, Chain-Driven Charbroilers

Regulated Component	Pollutant	Rule/Measure/Date							
		South Coast 1138, Control of Emissions from Restaurant Operations, adopted 11/14/97 ¹							
		Performance Standard							
New chain-driven charbroiler	VOC, PM	x Charbroiler/catalytic oxidizer tested and certified by the Executive Officer, or equipment that is equal to or more effective than catalytic oxidizer in reducing PM and VOC emissions and certified by Executive Officer							
Work practices	VOC, PM	x Maintain catalytic oxidizer in good working order including operation, cleaning, and maintenance per manufacturer's specifications							

¹ To date, South Coast Rule 1138 is the only rule or measure relating specifically to restaurant equipment.

Table II
Identification of Performance Standards
Source Category: Restaurants, Chain-Driven Charbroilers

Rule/Measure	Rule/Measure				
	South Coast 1138, Control of Emissions from Restaurant Operations, adopted 11/14/97				
Exemptions	Accept permit condition limiting amount of meat cooked to less than 875 pounds per week Supply evidence that emissions are less than 1 pound per day criteria contaminants				
Applicability	Owners and operators of commercial chain-driven charbroilers				

Table II
Identification of Performance Standards
Source Category: Restaurants, Chain-Driven Charbroilers

Rule/Measure	Rule/Measure				
	South Coast 1138, Control of Emissions from Restaurant Operations, adopted 11/14/97				
Comments	<p>Executive Officer will evaluate and report to the Governing Board within 18 months of rule adoption on feasibility of controlling emissions from under-fired charbroilers and other restaurant equipment (cost-effective controls on other restaurant equipment not currently available). (Rule 1138)</p> <p>All of PM emissions controlled are below PM_{10} in size, and majority is smaller than $PM_{2.5}$. (Draft Staff Report for Proposed Rule 1138, 10/10/97)</p> <p>Catalytic oxidizer used with chain-driven charbroiler may result in fuel savings and decreased hood duct cleaning cost. (Draft Staff Report for Proposed Rule 1138, 10/10/97)</p> <p>Catalytic oxidizer with 83% control efficiency for PM and</p>				

Table II
Identification of Performance Standards
Source Category: Restaurants, Chain-Driven Charbroilers

Rule/Measure	Rule/Measure				
	South Coast 1138, Control of Emissions from Restaurant Operations, adopted 11/14/97				
	VOC removed has been adopted as BACT for equipment processing more than 125 pounds per day product (1 pound PM emissions per day). (Proposed Revisions to Best Available Control Technology (BACT) Guidelines, 9/11/97, and personal communication with Anthony Oshinuga, (909) 396-2599).				

Small Industrial Boilers

Table I
Identification of Performance Standards
Source Category: Small Industrial Boilers
(1 million Btu/hour to less than 5 million Btu/hour)

Regulated Component	Pollutant	Rule/Measure/Date									
		South Coast 1146.1, Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators and Process Heaters, Amended 5/13/94		Ventura 74.15.1, Boilers, Steam Generators, and Process Heaters, Amended 8/14/96							
		Performance Standard									
Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters	NOx	x	30 ppm @ 3% oxygen on a dry basis, 15 minute avg, gaseous, liquid, or solid fuel	x	30 ppm @ 3% oxygen on a dry basis, 15 minute avg, gaseous or liquid fuel						
	CO		400 ppm		400 ppm						

Table II
Identification of Performance Standards
Source Category: Small Industrial Boilers

Rule/Measure	Rule/Measure				
	South Coast 1146.1	Ventura 74.15.1			
Exemptions	1. Boilers used exclusively to produce electricity for sale 2. Process heaters, kilns, and ovens used for drying, curing, baking, cooking, calcining, or vitrifying 3. Waste heat recovery boilers that are used to recover heat from the exhaust of combustion turbines 4. Unfired waste heat recovery boilers that are used to recover heat from the exhaust of any combustion equipment 5. Units with annual heat input of equal to or less than 1,800 million Btu which install a non-resettable totalizing fuel meter for each fuel burned and are either (a) tuned twice per year or (b) or operated in a manner that maintains stack-gas oxygen concentrations at less than or equal to 3 % on a dry basis for any 15-consecutive-minute averaging period	1. Kilns or ovens used for drying, baking, cooking, calcining or vitrifying 2. Unfired waste heat recovery boilers that are used to recover heat from the exhaust of any combustion equipment 3. Fuel-fired degreasing or metal finishing equipment 4. Units operated on alternate fuel under the following conditions: (a) alternate fuel use is required due to curtailment of natural gas service to the individual unit by the natural gas supplier - alternate fuel use in this case shall not exceed the period of natural gas curtailment (b) alternate fuel use is required to maintain the alternate fuel system - alternate fuel use in this case shall not exceed 50 hours per year 5. Units with annual heat input of less than 1,800 million Btu which install a totalizing fuel meter for each fuel burned and are tuned every 6 months			

Table II
Identification of Performance Standards
Source Category: Small Industrial Boilers

Rule/Measure	Rule/Measure				
	South Coast 1146.1	Ventura 74.15.1			
Applicability	Boilers, steam generators, and process heaters that are greater than 2 million Btu per hour and less than 5 million Btu per hour rated heat input capacity used in any industrial, institutional, or commercial operation	Boilers, steam generators, and process heaters with rated heat inputs equal to or greater than 1 million Btu per hour and less than 5 million Btu per hour			
Comments	SC 1146.1 and Ventura 74.15.1 are the only district rules in this category	As of May, 1993, there were several manufacturers of replacement burners for small boilers who displayed emissions well below the 30 ppm limit. These burners were less expensive than the previous technology that met 40 ppm. The 30 ppm limit required retrofitting affected boilers and heaters with emission controls such as low-NO _x burners, flue gas recirculation, O ₂ trim, and clean fuels. A reduction of about 65 t/y NO _x from 175 known units was projected for Rule 74.15.1.			

Solvent Cleaning and Degreasing

Notes: South Coast Rules 1122 and 1171, scheduled to take effect January 1, 1999, represent the most effective strategy for reducing emissions from this category. Several districts are considering the adoption of standards similar to those contained in these South Coast rules.

Table I
Identification of Performance Standards
Source Category: Solvent Cleaning and Degreasing

Regulated Component	Pollutant	Rule/Measure/Date									
		SCAQMD Rule 1122 Effect. January 1,1999		SCAQMD Rule 1171 Effect. January 1, 1999		BAAQMD Rule 8-16 Effect. September 1, 1999					
		Performance Standard									
Vapor Degreasers	VOCs		95% control of VOC emissions								
Remote Reservoir Cold Cleaners	VOCs				Clean Air Solvent or VOC limit: 50 g/l		VOC limit: 50 g/l (one remote reservoir cold cleaning unit per facility is exempt from this requirement.)				
Cold Cleaners	VOCs		Clean Air Solvent or VOC limit: 50 g/l				VOC limit: 50 g/l (one cold cleaning unit per facility is exempt from this requirement.)				

Table II
Identification of Achievable Performance Standards
Source Category: Solvent Cleaning and Degreasing

Rule/Measure	Rule/Measure				
	SCAQMD Rule 1122	SCAQMD Rule 1171	BAAQMD Rule 8-16		
Exemptions	<p>Solvent Cleaning operations:</p> <p>1) using Clean Air Solvents or a degreasing material containing less than 50 g/l VOCs;</p> <p>2) unheated batch-loaded cold cleaners ≤ 1 ft² and ≤ 2 gallons capacity;</p> <p>3) vapor degreasers until Jan 1, 2003 with surface areas less than 1.0 sq ft, a capacity less than 2 gallons, the equipment is used for electrical, high precision optics or electronics, aerospace and military applications for solar cell, laser hardware, space vehicle components, fluid systems, R&D, or lab tests in QA; and</p> <p>4) degreasers using halogenated solvents subject to the federal NESHAP for halogenated solvent cleaning.</p>	<p>Operations subject to Rules 1102, 1115, 1122, 1141, 1141.1, 1164, and 1421.</p> <p>Cleaning of solar cells, laser hardware, scientific instruments, high precision optics, polycarbonate plastics, conducting high performance laboratory tests on coatings, adhesives, or ink;</p>	<p>1) Wipe cleaning;</p> <p>2) Semiconductor solvent cleaning;</p> <p>3) Aerospace stripping operations;</p> <p>4) emulsion or solution cleaners;</p> <p>5) stripping operations</p> <p>6) dry cleaning operations.</p> <p>limited exemptions:</p> <p>1) small, unheated solvent cleaners;</p> <p>2) compounds with low volatility;</p> <p>3) one cold cleaning unit per facility;</p> <p>4) any permitted cold cleaning.</p>		

Table II
Identification of Achievable Performance Standards
Source Category: Solvent Cleaning and Degreasing

Rule/Measure	Rule/Measure				
	SCAQMD Rule 1122	SCAQMD Rule 1171	BAAQMD Rule 8-16		
Applicability	VOC solvent cleaning operations using batch-loaded cold cleaners, open-top vapor and conveyORIZED degreasers, and air-tight or airless cleaning systems.	VOC solvent cleaning operations during production, repair, maintenance, or servicing operations. Including the use of remote reservoir cold cleaners.	VOC cold, vapor, and conveyORIZED solvent cleaning operations.		
Comments	Most other districts' rules for these categories are quite dated, therefore, it would be inappropriate to list them for comparison purposes. However, several districts are considering the adoption of standards similar to these.				

Surface Coatings of Plastic Parts and Products

Table I
Identification of Performance Standards
Source Category: Surface Coatings of Plastic Parts and Products

Regulated Component	Pollutant	Rule/Measure/Date					
		South Coast 1145 Plastic, Rubber, and Glass Coatings 02/14/97	Bay Area 8-31 Surface Coating of Plastic Parts and Products 12/20/95				
		Performance Standard					
Compound Exemption	VOC	includes any compound which contains carbon element, but excluding: methane carbon monoxide carbon dioxide carbonic acid metallic carbides carbonates ammonium carbonate and exempt compounds	includes any organic compound, but excluding: methane carbon monoxide carbon dioxide carbonic acid metallic acid carbonates ammonium carbonate methylene chloride 1,1,1 trichloroethane CFC-113 CFC-11 CFC-12 CFC-114 CFC-115 HCFC-22 HFC-23 acetone PCBTF VMS				

Table I
Identification of Performance Standards
Source Category: Surface Coatings of Plastic Parts and Products

Regulated Component	Pollutant	Rule/Measure/Date									
		South Coast 1145 Plastic, Rubber, and Glass Coatings 02/14/97		Bay Area 8-31 Surface Coating of Plastic Parts and Products 12/20/95							
		Performance Standard									
General coatings One-component	VOC	x	275 g/L 2.3 lbs/gal		340 g/L 2.8 lbs/gal (assuming one- component)						
General Coatings Two-component	VOC	x	420 g/L 3.5 lbs/gal								
Military Spec. Coatings One-component	VOC	x	340 g/L 2.8 lbs/gal								
Military Spec. Coatings Two-component	VOC	x	420 g/L 3.5 lbs/gal	x	420 g/L 3.5 lbs/gal						
Multi-Colored Coatings	VOC		685 g/L 5.7 lbs/gal	x	450 g/L 3.8 lbs/gal						
Mold Seal Coatings	VOC	x	750 g/L 6.3 lbs/gal								
Vacuum Metalizing Coatings	VOC	x	800 g/L 6.7 lbs/gal								
Curtain Coated	VOC	x	500 g/L 4.2 lbs/gal								
Roll Coated	VOC	x	430 g/L 3.6 lbs/gal								

Table I
Identification of Performance Standards
Source Category: Surface Coatings of Plastic Parts and Products

Regulated Component	Pollutant	Rule/Measure/Date													
		South Coast 1145 Plastic, Rubber, and Glass Coatings 02/14/97				Bay Area 8-31 Surface Coating of Plastic Parts and Products 12/20/95									
		Performance Standard													
Optical Coatings	VOC	x	800 g/L 6.7 lbs/gal	x	800 g/L 6.7 lbs/gal										
Electric Dissipating Coatings & Shock-Free Coatings	VOC		360 g/L 3.0 lbs/gal	x	325 g/L 2.7 lbs/gal										
Metallic Coatings	VOC	x	420 g/L 3.5 lbs/gal	x	420 g/L 3.5 lbs/gal										
Extreme Performance	VOC			x	750 g/L 6.2 lbs/gal, and usage is limited to 3785 liters(1000 gal) in any calendar year										
High Gloss	VOC			x	420 g/L 3.5 lbs/gal										
Flexible primer	VOC			x	490 g/L 4.1 lbs/gal										
Base coat/clear coat (combined system)	VOC			x	540 g/L 4.5 lbs/gal										

Table I
Identification of Performance Standards
Source Category: Surface Coatings of Plastic Parts and Products

Regulated Component	Pollutant	Rule/Measure/Date							
		South Coast 1145 Plastic, Rubber, and Glass Coatings 02/14/97		Bay Area 8-31 Surface Coating of Plastic Parts and Products 12/20/95					
		Performance Standard							
Spray Application Equipment Limitations (Transfer Efficiency)	VOC		Operating in accordance to the manufacturer's specification, facility may use: 1. Electrostatic application 2. Flow coater 3. Roll coater 4. Dip coater 5. Hand application methods 6. High Volume, low- pressure (HVLP) spray, or 7. other coatings methods with 65% transfer efficiency with APCO & USEPA approval	x	With overall efficiency of 85%, facility shall use: 1. High Volume, Low Pressure (HVLP) spray 2. Electrostatic Spray 3. Detailing gun, or 4. APCO approved coating spray application with transfer efficiency of 85%				
Solvent Cleaning Operations	VOC	x	Pursuant to Rule 1171 Cleaning devices: -wipe cleaning -closed containers had held spray bottle without propellant		8-31-320 Solvent Evaporative Loss Minimization: 320.1 Shall use closed containers for storage or disposal of cloth or paper used for solvent				

Table I
Identification of Performance Standards
Source Category: Surface Coatings of Plastic Parts and Products

Regulated Component	Pollutant	Rule/Measure/Date						
		South Coast 1145 Plastic, Rubber, and Glass Coatings 02/14/97	Bay Area 8-31 Surface Coating of Plastic Parts and Products 12/20/95					
		Performance Standard						
		-cleaning equipment which has a solvent container that can be, and is closed during cleaning operations, except when depositing and removing objects to be cleaned and is closed during non-operation with the exception of maintenance and repair to the cleaning equipment itself; -Non-atomized solvent flow method -Solvent flushing method -Remote Reservoir Cleaners Storage and disposal -All VOC-containing solvents, used in solvent cleaning operations, shall be stored in	surface preparation and cleanup 320.2 Shall use equipment for collecting the cleaning equipment compounds 320.3 Shall close containers of coatings, catalyst or solvent when not in use					
		non-absorbent, non- leaking containers which shall be kept						

Table I
Identification of Performance Standards
Source Category: Surface Coatings of Plastic Parts and Products

Regulated Component	Pollutant	Rule/Measure/Date							
		South Coast 1145 Plastic, Rubber, and Glass Coatings 02/14/97	Bay Area 8-31 Surface Coating of Plastic Parts and Products 12/20/95						
		Performance Standard							
		closed at all times except when filling or emptying. It is recommended that cloth and paper moistened with VOC-containing solvents be stored in closed, non-absorbent, non-leaking containers. Control Equipment -a person may comply by using a VOC emission collected and control system in association with the solvent cleaning operation provided the emission control system shall collect at least 90%, by weight, of the emissions generated and have a destruction efficiency of at least 95%, by weight, or less than 50 ppm as carbon with no dilution							
Automotive Related	VOC	x	Group I vehicles are						

Table I
Identification of Performance Standards
Source Category: Surface Coatings of Plastic Parts and Products

Regulated Component	Pollutant	Rule/Measure/Date							
		South Coast 1145 Plastic, Rubber, and Glass Coatings 02/14/97	Bay Area 8-31 Surface Coating of Plastic Parts and Products 12/20/95						
		Performance Standard							
Coatings		subject to limits in Table 1 of subgraph (c)(1)(A) of Rule 1151 Group II vehicles are subject to limits in Table 2 of subgraph (c) (2)(B) of Rule 1151							
Air Pollution Control Equipment	VOC	x 1. Reduce VOC emissions at least 95% by weight, or the output concentration of VOC shall be < 50 ppm calculated as carbon with no dilution 2. Collects at least 90% by weight of VOC emissions							

Table I
Identification of Performance Standards
Source Category: Surface Coatings of Plastic Parts and Products

Regulated Component	Pollutant	Rule/Measure/Date									
		South Coast 1145 Plastic, Rubber, and Glass Coatings 02/14/97		Bay Area 8-31 Surface Coating of Plastic Parts and Products 12/20/95							
		Performance Standard									
Alternative Emission Control	VOC	x	Compliance with paragraph (c)(2) - coating VOC limits or (4) - Automotive coating limit, may be achieved by means of Alternative Emission Control Plan pursuant to Rule 108 - Alternative Emission Control Plans								
Recordkeeping Requirements	VOC	x	Pursuant to Rule 109 - Recordkeeping For VOC Compound Emissions Records maintained for 2 years; method of application; amount and type of coating, adhesive; solvent; amount of diluent surface pre., solvent VOC content appropriate vapor pressure -Control equipment: continuous monitoring	x	8-31-501 Records: 501.1 Maintain current data: a. Coating catalyst and reducer used b. VOC content of coating 501.2 Weekly record of usage: 1. Coating & mix ratio of component b. Quality of each coating applied c. Identification of specialty coating limit category						

Table I
Identification of Performance Standards
Source Category: Surface Coatings of Plastic Parts and Products

Regulated Component	Pollutant	Rule/Measure/Date						
		South Coast 1145 Plastic, Rubber, and Glass Coatings 02/14/97	Bay Area 8-31 Surface Coating of Plastic Parts and Products 12/20/95					
		Performance Standard						
		records maintained for 2 years. -VOC content of coatings in lbs. VOC/lbs solid	d. Over temperature 501.3 Daily record of coating usage when air pollution abatement equipment is used 501.4 Monthly record of solvent usage 501.5 Records shall be retained for the previous 24-month period					

Table II
Identification of Performance Standards
Source Category: Surface Coating of Plastic Parts and Products

Rule/Measure	Rule/Measure				
	SCAQMD 1145	BAAQMD 8-31			
Exemptions	<p>1. Paragraph (c)(2) - emissions limitation shall not apply to:</p> <p>a. Touch-up and repair coatings</p> <p>b. Stencil coatings applied on clear or transparent substrates</p> <p>c. Clean or translucent coatings, except for those subject to paragraph (c)(4) automotive coating</p> <p>d. Coatings applied at a paint manufacturing facility while conducting performance tests on the coatings</p> <p>e. Any individual coatings used in volumes is <50 gallons in any one year, or the total usage of all such coatings is < 200 gallons per year per facility</p> <p>f. Reflective coating applied to highway cones</p> <p>g. Mask coatings - coatings that are < 0.5 mm thick (dried) and the area coated is less than 25 sq. inches, or if the area coated is > 25 sq. inches, then APCO's approval is required</p>	<p>Exemption:</p> <p>8-31-114 Touch up operations</p> <p>8-31-121 Stencil coatings</p> <p>8-31-126 Translucent Coatings</p> <p>8-31-120 Test panels to evaluate coating performance</p> <p>8-31-123 Small User is exempt from 8-31-310 (Spray Application Equipment Limitations) where total amount of all coatings < 50 gallons/yr</p>			

Table II
Identification of Performance Standards
Source Category: Surface Coating of Plastic Parts and Products

Rule/Measure	Rule/Measure				
	SCAQMD 1145	BAAQMD 8-31			
	h. EMI/RFI shielding coatings i. Heparin-benzalkonium chloride (HBAC)-coatings applied to medical devices if total usage < 100 gallons per year per facility 2. Aerosol coating products	8-31-113 hand-held aerosol cans			

Table II
Identification of Performance Standards
Source Category: Surface Coating of Plastic Parts and Products

Rule/Measure	Rule/Measure				
	SCAQMD 1145	BAAQMD 8-31			
	3. Paragraph (c)(5) - Transfer Efficiency, shall not apply to airbrush operations using < 5 gallons per year	8-31-110 Adhesives: exempt adhesives, which is covered under Rule 8-51 8-31-111 Low Usage Coatings - exempt from Sections 8-31-302, 306 and 309 if volumes used < 75.7 liters (20 gallons)/ year provided Section 8-31-403 Low Usage Coating Petition is met, but total coating is limited to 208.2 L (55 gal.)/yr 8-31-118 Automobile Assembly Coatings is exempt 8-31-119 Aerospace Assembly Coatings is exempt if the plastic aerospace components is subject to Rule 8-29			

Table II
Identification of Performance Standards
Source Category: Surface Coating of Plastic Parts and Products

Rule/Measure	Rule/Measure				
	SCAQMD 1145	BAAQMD 8-31			
		8-31-122 Spray Application Equipment is exempt from 8-31-310 in following operations: 122.1 high solids, solvent-borne coatings with a solids content of 60% by volume to pre-textured or hair-cell surfaces subject to limits of Section 8-31-302 122.2 coatings to inner surface area of pipes 122.3 application of a textured finish coat 112.4 application of conductive coatings 8-31-125 Printed Circuit Boards is exempt but is subject to Rule 8-4			
Applicability	Coatings to any plastic, rubber or glass products; other applicability: any coating which is exempt from all or a portion of this rule shall comply with the provisions of Rule 442	Coating of plastic parts and products, including polyester resin (fiberglass) products			
Comments					

Wood Product Coatings

Notes: Several districts have adopted wood products coating rules that establish VOC content limitations for specific coatings. Determining which rule is the most stringent is difficult because: 1) some rules have limits for specific types of coatings that are not defined in other districts; 2) some rules define compliance options where a set of limits are required to be met; 3) some rules define separate limits based on the wood product category addressed, (i.e., refinished wood, custom cabinetry, shutters); and 4) rules exempt different compounds. Thus, it is important to provide the districts flexibility when selecting the best “combination” of requirements and not always the “most stringent” requirement. Each rule should be looked at as a system of emission limits and performance requirements designed to meet the goals of a specific district’s program.

Table I (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
		South Coast Rule 1136 6/14/96		Mojave Desert AQMD Rule 1114 11/25/96		SJUAPCD Rule 4606 12/19/96		BAAQMD Reg 8 Rule 32 6/19/96		San Diego County APCD Rule 67.11 8/13/97	
		Performance Standard									
PCE/TCA/Meth Chloride exemptions			Rule 102: PCE, TCA, methylene chloride		PCE,TCA, methylene chloride		Rule 1020: TCA, methylene chloride		None		Rule 2: PCE, TCA, methylene chloride
Adhesive and coating applications, general solvent limit		x	Rule 442 For sources exempt from Rule 1136, a person shall not discharge organic materials into the atmosphere from equipment in which organic solvents or materials containing organic solvents are used, unless such emissions have been reduced by at least 85 percent	x	Rule 442 A person shall not discharge organic materials into the atmosphere from equipment in which organic solvents or materials containing organic solvents are used, unless such emissions have been reduced by at least 85 percent						

Table I (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Performance Standard									
Spray coating equipment, general		x	Rule 481 A person shall not use or operate any spray painting or spray coating equipment unless one of the following conditions is met: (1) The spray coating equipment is operated inside a control enclosure (2)Coatings are applied with electrostatic and/or airless spray equipment. (3) A method of application or control is used which has an effectiveness equal to or greater than the equipment than (1) or (2) above. The provisions of this rule shall not apply to: (1) Spray coating of three gallons per day or less of coatings at a single location.								

Table I (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Performance Standard									
		(2) Spray coating of lacquers on cabinets and wood and simulated-wood surfaces adhesives, fibrous coatings, abrasive materials, portland cement mixtures, elastomers, stains, metal surface primers, or textured coatings, provided such spray coating cannot be conducted inside a control enclosure.									

Table I (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Performance Standard									
Option I (until 2005) - Sealer, clear - Topcoat, clear - Primer/sealer/ undercoat, pigmented - Topcoat, pigmented	VOC	x	- [550]{1.39} - [550]{1.37} - [550]{1.06} - [550]{1.10} sources currently meeting limits	x	-[550] -[550] -[550] -[550]	See individual limits		See individual limits		See individual limits	
Option II (until 2005) - Sealer, clear - Topcoat, clear - Primer/sealer/ undercoat,pigmented - Topcoat, pigmented	VOC	x	- [680]{3.36} - [275]{0.35} - [600]{1.08} - [275]{0.25} sources currently meeting limits	x	-[680] -[275] -[600] -[275]	See individual limits		See individual limits		See individual limits	
Topcoat, clear	VOC		- [275]{0.35}(2005)		-[275](2005)	[550] [275](1999)	x	[275] General Wood products		See Topcoat, clear: new and refinished	
Topcoat, clear: new wood product	VOC		See Topcoat, clear and Option I and II		See Topcoat, clear and Option I and II	See Topcoat, clear		See Topcoat, clear		[680] [275](2005)	
Topcoat, clear: refinished wood product	VOC		See Topcoat, clear and Option I and II		Exempt	Exempt		Exempt	x	[680]	
Topcoat, clear: shutters only	VOC	x	[680]{2.99} (until 2005)	x	[680](until 2005)	See Topcoat, clear		See Topcoat, clear		See Topcoat, clear: new and refinished	

Table I (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Performance Standard									
Topcoat, clear: custom cabinetry and custom architectural millwork	VOC		See Topcoat, clear and Option I and II		See Topcoat, clear and Option I and II		See Topcoat, clear	x	[550]		See Topcoat clear: new
Topcoat, clear: custom and contract furniture limits	VOC		See Topcoat, clear and Option I and II		See Topcoat, clear and Option I and II		See Topcoat, clear	x	[550]		See Topcoat, clear: new
Topcoat, pigmented	VOC	x	[275]{0.25}(2005)	x	[275](2005)		See Coating, pigmented		See Coating, pigmented		See Coating, pigmented: new and refinished
Topcoat, pigmented: Shutters	VOC	x	[600]{1.38} until 2005	x	[600]until 2005		See Coating, pigmented		See Coating, pigmented		See Coating, pigmented new and refinished
Sealer, clear	VOC	x	[275]{0.36}(2005)	x	275(2005)		See Sealer, sanding		See Sealer, sanding		See Sealer: new and refinished
Sealer: new wood products	VOC		See Sealer, clear and Option I and II		See Sealer, clear and Option I and II		See Sealer, sanding		See Sealer, sanding		[680] [550](2005)
Sealer: refinished wood products	VOC		See Sealer, clear and Option I and II		See Sealer, clear and Option I and II		See Sealer, sanding		See Sealer, sanding	x	[680]
Sealer, clear: Shutters	VOC	x	[275]{0.36} until 2005	x	[275]until 2005		See Sealer, sanding		See Sealer, sanding		See Sealer: new and refinished

Table I (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Performance Standard									
Sealer, sanding	VOC		See Sealer, clear and Option I and II		See Sealer, clear and Option I and II		[550] [275](2005)	x	[550]General wood products		See Sealer: new
Sealer, sanding: custom cabinetry and custom architectural millwork	VOC		See Sealer, clear and Option I and II		See Sealer, clear and Option I and II		See Sealer, sanding	x	[550]		See Sealer: new
Sealer, sanding; custom and contract furniture limits	VOC		See Sealer, clear and Option I and II		See Sealer, clear and Option I and II		See Sealer, sanding	x	[550]		See Sealer, new
Sealer, pigmented	VOC	x	[275]{0.21 }(2005)	x	[275](2005)		See Sealer, sanding		See Sealer, sanding		See Sealer: new and refinished
Sealer, pigmented: Shutters	VOC	x	[275]{0.33 }(until 2005)	x	[275] (until 2005)		See Sealer, sanding		See Sealer, sanding		See Sealer: new and refinished
Primer, pigmented	VOC	x	[275]{0.21 }(2005)	x	[275](2005)		See Coating, pigmented		See Coating, pigmented		See Coating, pigmented: new and refinished
Primer, pigmented: Shutters	VOC	x	[275]{0.33 } (until 2005)	x	[275] (until 2005)		See Coating, pigmented		See Coating, pigmented		See Coating, pigmented: new and refinished
Undercoat, pigmented	VOC	x	[275]{0.21 }(2005)	x	[275](2005)		See Coating, pigmented		See Coating, pigmented		See Coating, pigmented: new and refinished
Undercoat, pigmented: Shutters	VOC	x	[275]{0.33 } (until 2005)	x	[275] (until 2005)		See Coating, pigmented		See Coating, pigmented		See Coating, pigmented: new and refinished

Table I (1 of 2)
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		Performance Standard									
Barrier coat, plastic component	VOC	x	[760]{3.9} [275]{0.28}(2005)		See Undercoat, pigmented		See Coating, pigmented		See Coating, pigmented		See Coating, pigmented: new and refinished
Filler, composite wood edge	VOC	x	[550]{1.15} [275{0.31}]](2005)		See Filler		See Filler		See Filler		See Filler: new and refinished
Coating, extreme performance	VOC	x	[420]{0.51} [275{0.33}]](2005)								
Filler	VOC		[500]{0.66} [275]{0.18}(2005)		[500] [275]2005	x	[500] [275](1999)		[500]General		See Filler: new and refinished
Filler, new wood product	VOC		See Filler		See Filler		See Filler		See Filler		[500]
Filler, refinished wood product	VOC		See Filler		Exempt		Exempt		Exempt	x	[500]
Filler, custom cabinetry and custom architectural millwork	VOC		See Filler		See Filler		See Filler	x	[500]		See Filler: new and refinished
Filler, custom and contract furniture limits	VOC		See Filler		See Filler		See Filler	x	[500]		See Filler: new and refinished
Stain, high- solid	VOC	x	[550]{1.23} [3501{0.42}]](2005)	x	[550] [350](2005)	x	[700] [240](1999)		[700]General wood products		See Stain, high-solid: new and refinished
Stain, high-solid: new	VOC		See Stain, high-solid		See Stain, high-solid		See Stain, high-solid		See Stain, high-solid		[700]

Table I (1 of 2)
Identification of Performance Standards
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		Performance Standard									
wood products											[550](2005)
Stain, high-solid: refinished wood products	VOC		See Stain, high-solid		Exempt		Exempt		Exempt	x	[700]
Stain, high-solid: custom cabinetry and custom architectural millwork	VOC		See Stain, high-solid		See Stain, high-solid		See Stain, high-solid	x	[700]		See Stain, high-solid; new
Stain, high-solid: custom and contract furniture limits	VOC		See Stain, high-solid		See Stain, high-solid		See Stain, high-solid	x	[700]		See Stain, high-solid; new
Inks	VOC	x	[500]{0.96}	x	[500]	x	[500]				See Ink: new and refinished
Inks, new wood products	VOC		See Inks		See Inks		See Inks			x	[500]
Inks, refinished wood products	VOC		See Inks		Exempt		Exempt		Exempt	x	[500]
Coating, mold-seal	VOC	x	[750]{4.2}	x	[750]	x	[750]				See Any other coating: new and refinished
Coating, mold-seal: new wood products	VOC		See Coating, mold-seal		See Coating, mold-seal		See Coating, mold-seal				See Any other coating: new and refinished
Coating, mold-seal:	VOC		See Coating, mold-seal		Exempt		Exempt		Exempt		See Any other coating:

Table I (1 of 2)
Identification of Performance Standards
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		Performance Standard									
refinished wood products											new and refinished
Coating, multi-color	VOC		[685]{2.6} [275]{0.33}(2005)		[685] [275](2005)	x	[275]				See Any other coating: new and refinished
Coating, multi-color: new wood products	VOC		See Coating, multi-color		See Coating, multi-color		See Coating, multi-color				[685]
Coating, multi-color: refinished wood products	VOC		See Coating, multi-color		Exempt		Exempt		Exempt		[685]
Barrier coat, low-solid plastic component	VOC	x	[760] [120](2005)		See Undercoat, pigmented		See Coating, pigmented		See Coating, pigmented		See Coating, pigmented: new and refinished
Stain, low-solid	VOC		[480] [120](2005)		[480] [120]	x	[480] [120](1999)		[480]General wood products		See Stain, low-solid: new and refinished
Stain, low-solid: new wood products	VOC		See Stain, low-solid		See Stain, low-solid		See Stain, low-solid		See Stain, low-solid		[700] [480](2005)
Stain, low-solid: refinished wood products	VOC		See Stain, low-solid		Exempt		Exempt		Exempt		[700]

Table I (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Performance Standard									
Stain, low-solid: custom cabinetry and custom architectural millwork	VOC		See Stain, low-solid		See Stain, low-solid		See Stain, low-solid	x	[480]		See Stain, low-solid: new and refinished
Stain, low-solid: custom and contract furniture limits	VOC		See Stain, low-solid		See Stain, low-solid		See Stain, low-solid	x	[480]		See Stain, low-solid: new and refinished
Toner, low-solid	VOC	x	[480] [120](2005)	x	[480] [120](2005)						See Toner, low-solid: new and refinished
Toner, low-solid: new wood products	VOC		See Toner, low-solid		See Toner, low-solid						[700] [480](2005)
Toner, low-solid, refinished wood products	VOC		See Toner, low-solid		Exempt		Exempt		Exempt		[700]
Washcoat, low-solid	VOC		[480] [120](2005)		[480] [120](2005)				[480]General wood products		See Washcoat, low-solid: new and refinished
Washcoat, low-solid: new wood products	VOC		See Washcoat, low-solid		See Washcoat, low-solid						[700] [480](2005)

Table I (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Performance Standard									
Washcoat, low-solid: refinished wood products	VOC		See Washcoat, low-solid		Exempt		Exempt		Exempt		[700]
Washcoat, low-solid: custom cabinetry and custom architectural millwork	VOC		See Washcoat, low-solid		See Washcoat, low- solid			x	[480]		See Washcoat, low-solid: new
Washcoat, low-solid: custom and contract furniture limits	VOC		See Washcoat, low-solid		See Washcoat, low- solid			x	[480]		See Washcoat, low-solid: new
Coating, pigmented	VOC		See specific pig. coating limits and Option I and II		See specific pig. coating limits and Option I and II		[550] [275](1999)	x	[275]General wood products		See Coating, pigmented: new and refinished
Coating, pigmented: new wood products	VOC		See specific pig. coating limits and Option I and II		See specific pig. coating limits and Option I and II		See Coating, pigmented		See Coating, pigmented		[600] [275](2005)
Coating, pigmented: refinished wood products	VOC		See specific pig. coating limits and Option I and II		Exempt		Exempt		Exempt	x	[600]
Coating, pigmented: custom cabinetry and custom architectural millwork	VOC		See specific pig. coating limits and Option I and II		See specific pig. coating limits and Option I and II		See Coating, pigmented	x	[550]		See Coating, pigmented: new and refinished
Coating, pigmented:	VOC		See specific pig.		See specific pig.		See Coating,	x	[550]		See Coating, pigmented:

Table I (1 of 2)
Identification of Performance Standards
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		Performance Standard									
custom and contract furniture limits			coating limits and Option I and II		coating limits and Option I and II		pigmented				new and refinished
Strippers	VOC		[350] or VP=2mm Hg/0.04psia		[350]		[350] [450] Spraybooth			x	[200] VP=20mmHg
Adhesives	VOC				[250]			x	Rule 8 Reg 5 -Contact Bond Adhesive [200]		
Varnish, conversion	VOC									x	[550]New
Solvents, surface prep. And clean-up	VOC		Rule 1171 [950] coating application equipment 35 mm Hg		[200]		[200] [950]coating application equipment, only. 35mmHg			x	[200] VP=20mmHg BP=190C
Coating, medium density fiberboard: new wood products	VOC									x	[680] [550](2005)
Coating, medium density fiberboard: refinished wood products	VOC									x	[680]
Any other coating: new wood products	VOC									x	[420] [275](2005)

Table I (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Performance Standard									
Any other coating: refinished wood products	VOC									x	[420]
Topcoat, waterborne	VOC		See topcoat limits and Option I and II		See topcoat limits and Option I and II		See Topcoat, clear		See Topcoat, clear		See Topcoat, clear: new and refinished
CTG option - Topcoat - Sealer	VOC		See individual limits		See individual limits		See individual limits		See individual limits		See individual limits
CTG option - Acid-cured alkyd amino conversion varnish topcoat -acid-cured alkyd amino vinyl sealer	VOC		See individual limits		See individual limits		See individual limits		See individual limits		See individual limits
CTG option - Acid-cured alkyd amino conversion varnish topcoat -sealer	VOC		See individual limits		See individual limits		See individual limits		See individual limits		See individual limits
-CTG option - Sealer -Topcoat -Acid-cured alkyd amino vinyl sealer	VOC		See individual limits		See individual limits		See individual limits		See individual limits		See individual limits
Topcoat			See Topcoat, clear;		See Topcoat, clear;		See Topcoat, clear; and		See Topcoat, clear; and		See Topcoat, clear: new

Table I (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Performance Standard									
			Topcoat, pigmented; and Option I and II		Topcoat, pigmented; and Option I and II		Coating, pigmented		Coating, pigmented		and refinished
Washcoat			See Washcoat, low-solid		See Washcoat, low-solid				See Washcoat, low-solid		See Washcoat, lowsolid: new and refinished
Sealer			See Sealer, clear; and Option I and II		See Sealer, clear; and Option I and II		See Sealer, sanding		See Sealer, sanding		See Sealer; new and refinished
Stain			See specific stain limits		See specific stain limits		See specific stain limits		See specific stain limits		See specific stain limits
Basecoat	VOC		See Undercoat limits		See Undercoat limits		See Coating, pigmented		See Coating, pigmented		See Coating, pigmented: new and refinished
Enamel	VOC										
Thinner	VOC	x	included in as applied limit	x	included in as applied limit	x	included in as applied limit	x	included in as applied limit	x	included in as applied limit

Table I (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Performance Standard									
Control Equipment Requirements	VOC	x	Equivalent to reduction in VOC emission associated with application of VOC limits(Equation)	x	Overall control efficiency of at least 85%	x	Overall capture and control efficiency of 85% ; minimum required control efficiency equal to application of VOC limits(Equation)			x	Capture and control efficiency of 85%
Transfer Efficiency	VOC	x	use one of the following methods: - electrostatic - flow coat - dip coat - HVLP spray - paint brush - hand roller - roll coater - other 65% transfer eff	x	use one of the following methods: - flowcoat - dip coat - HVLP spray - paint brush - hand roller - roll coater - other 65% transfer eff	x	use one of the following methods: - electrostatic - flowcoat - dip coat - HVLP spray - paint brush - hand roller - roll coater - detail or touch-up guns - other 65% transfer eff		use one of the following methods: - airless - air assisted airless - electrostatic - HVLP spray - detail or touch-up guns		use one of the following methods: - electrostatic - flow coat - dip coat - HVLP spray - hand application method - roll coater - other transfer efficiency equal to one of the above

Table I (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Performance Standard									
Emission Averaging		x	-Actual emissions from coatings being averaged less than 90% of the allowable emissions - daily basis - 100% after 2005 - Plan required pursuant to Rule 221					-Compliance with VOC limits may be achieved by averaging . -Compliance may be demonstrated by averaging for multiple day periods on a rolling basis for a period no greater than thirty days -Plan required			
Alternative Emission Control Plan			Pursuant to Rule 108 NO SOURCES							Pursuant to Rule 67.1	
Work Practice Standard: Solvent Cleaning Operations		x	Pursuant to Rule 1171 Cleaning devices: -wipe cleaning -closed containers hand-held spray bottle without propellant -Cleaning equipment which has a solvent container that can be, and is closed during cleaning operations, except when depositing and removing objects to be cleaned, and is closed during		-Closed, nonabsorbant containers for storage or disposal of cloth or paper used -Store fresh or spent solvent in a closed container - Bans use of organic compounds in clean-up of spray equipment unless equipment for collecting cleaning compounds and minimizing evaporation is used		- Closed, nonabsorbant containers for storage or disposal of solvent laden cloth or paper -Store fresh or spent solvents in closed containers -Keep containers of stripper, coating, adhesive, catalyst closed when not in use. - Spray equipment cleaned in enclosed system		-Close d containers for storage or disposal of cloth or paper used for solvent prep or clean-up. - Store fresh or spent solvent in closed containers - Bans use of organic compounds for clean-up of mixing, storage, or spray equipment, unless collecting equipment used. -keep stripper, coating, adhesive, catalyst,		-Cleaning of application equipment: 1) equipment parts cleaned in container that is kept closed except when adding or draining cleaning material or equipment parts. 2) system used that totally encloses the component parts being cleaned 3) other APCO approved devices 4)Spray application equipment shall not be used to

Table I (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date					
		South Coast Rule 1136 6/14/96	Mojave Desert AQMD Rule 1114 11/25/96	SJUAPCD Rule 4606 12/19/96	BAAQMD Reg 8 Rule 32 6/19/96	San Diego County APCD Rule 67.11 8/13/97	
		Performance Standard					
		<div>nonoperation with the exception of maintenance and repair to the cleaning equipment itself; -Non-atomized solvent flow method -Solvent flushing method - Remote Reservoir Cleaners Storage and disposal - All VOC-containing solvents, used in solvent cleaning operations, shall be stored in non-absorbent, non-leaking containers which shall be kept closed at all times except when filling or emptying. It is recommended that cloth and paper moistened with VOC-containing solvents be stored in closed, non-absorbent, non-leaking containers.</div>				<div>thinner containers closed when not in use.</div>	<div>dispose waste coatings into the air.</div>

Table I (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
			Control Equipment - a person may comply by using a VOC emission collection and control system in association with the solvent cleaning operation provided the emission control system shall collect at least 90 percent, by weight, of the emissions generated and have a destruction efficiency of at least 95 percent, by weight, or less than 50 parts per million (PPM) as carbon with no dilution								
Work Practice Standard: Work Practice Implementation Plan											
Work Practice Standard: Operator Training Course											

Table I (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
Work Practice Standard: Inspection and Maintenance Plan											
Work Practice Standard: Formulation Assessment Plan											
Work Practice Standard: Cleaning and Washoff Solvent Accounting System											

Table I (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
Monitoring, Recordkeeping, and Reporting: Records		N Q	- Rule 109: records maintained for 2 years; method of application; amount and type of coating, adhesive, solvent; amount of dilutant surface prep., solvent; VOC content; where appropriate vapor pressure -Control equipment: continuous monitoring records maintained for 2 years. - VOC content of coatings in lbs. VOC/lbs solid.	N Q	All records retained for 5 years Available during inspection - list of coatings - coating, catalyst, reducer used -mix ratio -VOC content, as applied Daily records -coating and mix ratios -quantity of coating -type and amount of solvent used -daily records of key monitoring equipment parameters and maintenance	N Q	All records retained for 2 years - list of coatings - mix ratio -VOC content, as applied -VOC content of solvents Daily records -coating and mix ratio -quantity of coating -id of coating category -type and amount of solvent used Refinishing, Replacement, and custom furniture: -coating, catalyst, reducer used -mix ratio -VOC content Daily records -amount of coating, catalyst, reducer used -type and amount of solvent used -type of stripper	N Q	General: - coating, catalyst, reducer used -mix ratio -VOC content -solids content Daily records -coating and mix ratio -quantity of coating used -id of coating category -type and amount of solvent used for clean-up and surface prep. -key operating parameters of C.E - records retained for 2 months Refinishing, Replacement, and Custom Replica Furniture -coating, catalyst reducer used -mix ratio -VOC content Monthly basis -amount of coating,	N Q	All records maintained for 3 years -list of coatings, strippers, surface prep and cleaning material -mix ratio -VOC content, vapor pressure -coating category -maintain daily or monthly records of materials used - maintain records of dates and amount of material added to coating dip tanks Control Equipment: - same as above plus: - daily records of coatings not in compliance - daily records of key operating parameters

Table I (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Performance Standard									
							-wood product types -Key operating parameters of C.E.		catalyst, reducer used -type and amount solvent used for clean- up and surface prep. -type and amount of stripper used. Custom architectural millwork and cabinetry recordkeeping -maintain and make available job orders, shop drawings or blueprints, designer or architectural drawings		
Monitoring, Recordkeeping, and Reporting: Emission averaging		N Q	-Emission averaging plan								

Notes: Regarding coating requirements - Units are [grams per liter] and {lbs-VOC/lbs-solids}
Values in () are years future standards are implemented

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date							
		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC	CTG 9/27/96	NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.					
		Performance Standard							
PCE/TCA/Meth Chloride exemptions		Rule 2: TCA, methylene chloride	40 CFR 51.100: PCE, TCA, methylene chloride	Does not exempt TCA, PCE, methylene chloride					
Adhesive and coating applications, general solvent limit									
Spray coating equipment, general									
Option I - Sealer, clear - Topcoat, clear - Primer/sealer/ undercoat, pigmented - Topcoat, pigmented	VOC	See individual limits	See CTG Options						

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date						
		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC	CTG 9/27/96	NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.				
		Performance Standard						
Option II - Sealer, clear - Topcoat, clear - Primer/sealer/ undercoat, pigmented - Topcoat, pigmented	VOC		See individual limits	See CTG Options				
Topcoat, clear	VOC		See Topcoat, clear: New and refinished	See Topcoat, waterborne and CTG options	See Topcoat			
Topcoat, clear: new wood product	VOC	x	[275] sources currently meeting limit	See Topcoat, waterborne and CTG options	See Topcoat			
Topcoat, clear: refinished wood product	VOC	x	[680] sources currently meeting limit	See Topcoat, waterborne and CTG options	See Topcoat			
Topcoat, clear: shutters only	VOC		See Topcoat, clear: new and refinished	See Topcoat, waterborne and CTG options	See Topcoat			
Topcoat, clear: custom	VOC		See Topcoat, clear: new	See Topcoat,	See Topcoat			

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
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		Performance Standard									
cabinetry and custom architectural millwork					waterborne and CTG options						
Topcoat, clear: custom and contract furniture limits	VOC		See Topcoat, clear: new		See Topcoat, waterborne and CTG options		See Topcoat				
Topcoat, pigmented	VOC		See Coating, pigmented: new and refinished		See Topcoat, waterborne and CTG options		See Topcoat				
Topcoat, pigmented: Shutters	VOC		See Coating, pigmented: new and refinished		See Topcoat, waterborne and CTG options		See Topcoat				
Sealer, clear	VOC		See Sealer: new and refinished		See CTG options		See Sealer				
Sealer, new wood products	VOC	x	[240] source currently meeting limit		See CTG options		See Sealer				

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date						
		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC	CTG 9/27/96	NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.				
		Performance Standard						
Sealer: refinished wood products	VOC	x [680] source currently meeting limit	See CTG options	See Sealer				
Sealer, clear: Shutters	VOC	See Sealer: new and refinished	See CTG options	See Sealer				
Sealer, sanding	VOC	See Sealer: new	See CTG options	See Sealer				
Sealer, sanding: custom cabinetry and custom architectural millwork	VOC	See Sealer: new	See CTG options	See Sealer				
Sealer, sanding; custom and contract furniture limits	VOC	See Sealer: new	See CTG options	See Sealer				
Sealer, pigmented	VOC	See Sealer: new and refinished	See CTG options	See Sealer				
Sealer, pigmented: Shutters	VOC	See Sealer: new and refinished	See CTG options	See Sealer				
Primer, pigmented	VOC	See coating, pigmented: new and refinished	See CTG options					

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date							
		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC	CTG 9/27/96	NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.					
		Performance Standard							
Primer, pigmented: Shutters	VOC	See Coating, pigmented: new and refinished	See CTG options						
Undercoat, pigmented	VOC	See Coating, pigmented: new and refinished	See CTG options						
Undercoat, pigmented: Shutters	VOC	See Coating, pigmented: new and refinished	See CTG options						
Barrier coat, plastic component	VOC	See Coating, pigmented: new and refinished	See CTG options						
Filler, composite wood edge	VOC	See Filler new and refinished							
Coating, extreme performance	VOC								

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC	CTG 9/27/96	NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.							
		Performance Standard									
Filler	VOC		See Filler: new and refinished								
Filler, new wood product	VOC	x	[275] district unsure as to whether limit is currently being met								
Filler, refinished wood product	VOC	x	[500] district unsure as to whether limit is currently being met								
Filler, custom cabinetry and custom architectural millwork	VOC		See Filler: new								
Filler, custom and contract furniture limits	VOC		See Filler: new								
Stain, high- solid	VOC		See Stain, high-solid; new and refinished			See Stain					

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date							
		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC	CTG 9/27/96	NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.					
		Performance Standard							
Stain, high-solid: new wood products	VOC	x	[240] source currently meeting limit			See Stain			
Stain, high-solid: refinished wood products	VOC	x	[700] source currently meeting limit			See Stain			
Stain, high-solid: custom cabinetry and custom architectural millwork	VOC		See Stain, high-solid: new			See Stain			
Stain, high-solid: custom and contract furniture limits	VOC		See Stain, high-solid: new			See Stain			
Inks	VOC		See Ink: new and refinished						
Inks, new wood products	VOC	x	[500]						

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC	CTG 9/27/96	NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.							
		Performance Standard									
Inks, refinished wood products	VOC	x	[500]								
Coating, mold-seal	VOC		See Coating, mold-seal: new and refinished								
Coating, mold-seal: new wood products	VOC	x	[750]								
Coating, mold-seal: refinished wood products	VOC	x	[750]								
Coating, multi-color	VOC		See Coating, multi-color: new and refinished								
Coating, multi-color: new wood products	VOC	x	[275] district unsure as to whether limit is currently being met								

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC		CTG 9/27/96		NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.					
		Performance Standard									
Coating, multi-color: refinished wood products	VOC	x	[680] district unsure as to whether limit is currently being met								
Barrier coat, low-solid plastic component	VOC		See Coating, pigmented: new and refinished								
Stain, low-solid	VOC		See Stain, low-solid: new and refinished				See Stain				
Stain, low-solid: new wood products	VOC	x	[120] district unsure as to whether limit is currently being met				See Stain				

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date							
		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC	CTG 9/27/96	NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.					
		Performance Standard							
Stain, low-solid: refinished wood products	VOC	x	[480] district unsure as to whether limit is currently being met			See Stain			
Stain, low-solid: custom cabinetry and custom architectural millwork	VOC		See Stain, low-solid: new			See Stain			
Stain, low-solid: custom and contract furniture limits	VOC		See Stain, low-solid: new			See Stain			
Toner, low-solid	VOC		See Toner, low-solid: new and refinished						
Toner, low-solid: new wood products	VOC	x	[120] district unsure as to whether limit is currently being met						

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC	CTG 9/27/96	NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.							
		Performance Standard									
Toner, low-solid, refinished wood products	VOC	x	[480] district unsure as to whether limit is currently being met								
Washcoat, low-solid	VOC		See Washcoat, low-solid: new and refinished				See Washcoat				
Washcoat, low-solid: new wood products	VOC	x	[120] district unsure as to whether limit is currently being met				See Washcoat				
Washcoat, low-solid: refinished wood products	VOC	x	[480] district unsure as to whether limit is currently being met				See Washcoat				
Washcoat, low-solid: custom cabinetry and custom architectural millwork	VOC		See Washcoat, low-solid: new				See Washcoat				
Washcoat, low-solid:	VOC		See Washcoat, low-				See Washcoat				

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Performance Standard									
custom and contract furniture limits			solid: new								
Coating, pigmented	VOC		See Coating, pigmented: new and refinished								
Coating, pigmented: new wood products	VOC	x	[275] source currently meeting limit								
Coating, pigmented: refinished wood products	VOC	x	[600] source currently meeting limit								
Coating, pigmented: custom cabinetry and custom architectural millwork	VOC		See Coating, pigmented: new								
Coating, pigmented: custom and contract furniture limits	VOC		See Coating, pigmented: new								
Strippers	VOC	x	[350] or 2mm Hg 0.04 psia	x	(0.8)Spray booth		(0.8)Spray booth				

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC	CTG 9/27/96	NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.					
		Performance Standard							
Adhesives	VOC					Foam Adhesives -{1.8}Existing -{0.2}New Source Others -{1.0} Existing -{0.2} New Source (existing sources <50 tons of HAP per year 12/98)			
Varnish, conversion	VOC								
Solvents, surface prep. And clean-up	VOC	x [200] 45mm Hg							
Coating, medium density fiberboard: new wood products	VOC								

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Performance Standard									
Coating, medium density fiberboard: refinished wood products	VOC										
Any other coating: new wood products	VOC										
Any other coating: refinished wood products	VOC										
Topcoat, waterborne	VOC		x {0.8}								
CTG option - Topcoat - Sealer	VOC	See individual limits	x {-1.8} x {-1.9}								

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Performance Standard							
CTG option - Acid-cured alkyd amino conversion varnish topcoat -acid-cured alkyd amino vinyl sealer	VOC	See individual limits	x	-{2.0} -{2.3}					
CTG option - Acid-cured alkyd amino conversion varnish topcoat -sealer	VOC	See individual limits	x	-{2.0} -{1.9}					
-CTG option - Sealer -Topcoat -Acid-cured alkyd amino vinyl sealer	VOC/ROC	See individual limits	x	-{1.8} -{2.3}					

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date								
		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC		CTG 9/27/96		NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.				
		Performance Standard								
Topcoat			See Topcoat, clear limit		See Topcoat, waterborne and CTG options		-{1.0}Existing Source -{0.8}New Source (existing sources <50 tons of HAP per year 12/98)			
Washcoat			See washcoat, low solid: new and refinished				-{1.0}Existing Source -{0.8}New Source (existing sources <50 tons of HAP per year 12/98)			
Sealer			See Sealer: new and refinished		See CTG options		-{1.0}Existing Source -{0.8}New Source (existing sources <50 tons of HAP per year 12/98)			
Stain			See Stain, high-solid and stain, low-solid: new and refinished				-{1.0}Existing Source -{1.0}New Source (existing sources <50 tons of HAP per year 12/98)			

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Performance Standard									
Basecoat							-{1.0} Existing -{0.8} New Source (existing sources <50 tons of HAP per year 12/98)				
Enamel							-{1.0} Existing -{0.8} New Source (existing sources <50 tons of HAP per year 12/98)				
Thinner		x	included in as-applied limit				-{10.0} Existing -{10.0} New Source -3.0% VHAP by weight if used to thin washcoat, basecoat or enamel onsite (existing sources <50 tons of HAP per year 12/98)				

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Performance Standard									
Control equipment requirement	VOC		Combined capture and control efficiency of 80%		x	use a control system that will provide an equivalent emission reduction as VOC limits. (Equation)		Control device must operate at an efficiency that is equivalent to {1.0} existing or {0.8}new. For adhesives {1.0} existing or {0.2}adhesives Equation. (existing sources <50 tons of HAP per year 12/98)			

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Performance Standard							
Transfer Efficiency		use one of the following methods: - electrostatic (60KV) - flow coat - dip coat - HVLP spray - paint brush - hand roller - roll coater -air assisted, airless spray(7/1/2000) - other 65% transfer eff	Conventional gun: air spray guns can be used only as follows: - touch-up and repair - finishing material less than 1.0lb VOC/lb solid -automated spray - cumulative application less than 5.0% total gallons - only tech/economic feasible method	Conventional gun: air spray guns can be used only as follows: - touch-up and repair - finishing material less than 1.0lb VOC/lb solid -automated spray - cumulative application less than 5.0% total gallons - only tech/economic feasible method					

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC	CTG 9/27/96	NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.				
		Performance Standard						
Emission Averaging				-Averaging allowed using lower of actual vs. allowable values -Daily average. -Average must be less than or equal to 90% of coatings meeting standard		Averaging allowed for finishing materials only. Monthly average. For existing sources, the average VHAP content for all finishing materials must be no greater than 1.0 lb VHAP/lb solids. New source, the limit is 0.8. ALL coatings not just specific coatings with emission limits must be included in averaging equation.		

Table I (2 of 2)
Identification of Performance Standards
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		Performance Standard						
Alternative Emission Control Plan			Use any combination of an averaging approach, compliant finishing material, and control system.	Use any combination of an averaging approach, compliant finishing material, and control system.				

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC		CTG 9/27/96		NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.			
		Performance Standard							
Work Practice Standards: Solvent Cleaning Operations		x	-ROC-containing materials for spray equipment cleaning cannot be used unless system used is, or equivalent to via test, an enclosed gun washer or “low emission spray gun cleaner” or pressure is 45mm Hg. -Storage of ROC-containing materials in closed non-leak absorbant containers.	x	-Spray Booth: use no more than 1 gallon of organic solvent per booth -Storage: normally closed containers (ncc)for finishing, gluing, cleaning and washoff. -Line cleaning: pump or drain solvent into ncc. -Gun cleaning: collect cosolvent and store in ncc. -Washoff: use ncc	-Spray Booth: use no more than 1 gallon of organic solvent per booth -Storage: normally closed containers (ncc)for finishing, gluing, cleaning and washoff. -Line cleaning: pump or drain solvent into ncc. -Gun cleaning: collect cosolvent and store in ncc. -Washoff: use ncc -Table 4 of NESHAP id’s pollutants excluded from use in washoff			

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC		CTG 9/27/96		NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.					
		Performance Standard									
Work Practice Standard: Work Practice Implementation Plan				N Q	Develop a plan to implement WPS and maintain onsite		Develop a plan to implement WPS and maintain onsite				
Work Practice Standard: Operator Training Course				N Q	-Train all operators on proper application, clean-up, and equipment use - Write a training program and retain onsite		-Train all operators on proper application, clean-up, and equipment use - Write a training program and retain onsite				
Work Practice Standard: Leak Inspection and Maintenance Plan				N Q	-Develop written inspection and maintenance plan to address and prevent leaks. The plan should identify a minimum inspection frequency of once per month and procedures for addressing malfunctions		-Develop written inspection and maintenance plan to address and prevent leaks. The plan should identify a minimum inspection frequency of once per month and procedures for addressing malfunctions				

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC		CTG 9/27/96		NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.					
		Performance Standard									
Work Practice Standard: Formulation Assessment Plan							-Identify VHAPs of potential concern used in finishing operations. Establish a baseline level for each VHAP. If exceeded, the source shall develop a plan to reduce usage.				
Work Practice Standard: Cleaning and Washoff Solvent Accounting System				N Q	-Maintain a log of the quantity and type of solvent used for washoff and cleaning. -Maintain a log of the number of pieces washed-off and the reason for the washoff		-Maintain a log of the quantity and type of solvent used for washoff and cleaning. -Maintain a log of the number of pieces washed-off and the reason for the washoff				

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date								
		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC		CTG 9/27/96		NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.				
		Performance Standard								
Monitoring, Recordkeeping, and Reporting: Records		N Q	Retain records for 2 years - list of coatings in use and storage, include mix ratio, ROC content as applied - list solvent and stripper in use and storage, include manufacturer, ROC content, partial pressure -daily records on amount coating,stripper, solvent used; ROC content ea.; density ea. Monthly records if only compliant coatings are kept -Emission control system: daily record of	N Q	Compliant coatings: -Certified Public Data Sheets (CPDS) for each coating -Data sheets showing thinner usage and calculation of VOC content, as applied. - reservoir solvent and finishing material info for continuous coaters calculation Add-on control -CPDS -copies of calculations demonstrating equivalency of control system. -records of the daily average value of each continuously monitored parameter -pressure drop info as		Compliant coatings: -Certified Public Data Sheets (CPDS) for each coating -Data sheets showing thinner usage and calculation of VHAP, in lb VHAP/lbs solid content, as applied. - reservoir solvent and finishing material inf for continuous coaters Add-on control -CPDS -copies of calculations demonstrating equivalency of control system. -records of the daily average value of each			

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date					
		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC	CTG 9/27/96	NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.			
		Performance Standard					
		key system operating parameters and maintenance procedures	required. Work practice standard records: - Operator training program - Inspection and maintenance plan - Cleaning and washoff solvent accounting system - Spray booth cleaning - Application equipment requirements	continuously monitored parameter -pressure drop info as required. Adhesives -CPDS - if thinned, thinner usage, VHAP content as applied -records documenting process contact adhesive was used -Add-on control: CPDS; copies of calculations for control system; daily average value of each continuously monitored parameter; system. pressure drop info. as required			

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date									
		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC		CTG 9/27/96		NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.					
		Performance Standard									
						Work practice standard records: - Operator training program - Inspection and maintenance plan - Cleaning and washoff solvent accounting system - Spray booth cleaning - Application equipment requirements -Formulation assessment plan records					
Monitoring, Recordkeeping, and Reporting: Emission averaging				N Q	Averaging: - CPDS - Data sheets showing coating and thinner usage	Averaging: - CPDS - Data sheets showing coating and thinner usage					

Table I (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Regulated Component	Pollutant	Rule/Measure/Date							
		Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC = VOC		CTG 9/27/96		NESHAP 12/7/95 *All limits except Strippers are VHAP limits. VHAP limits were not compared with VOC limits.			
		Performance Standard							
				- amount of coating used per day - copies of averaging		- amount of coating used per day - copies of averaging calculation			

Note: Regarding coating requirements - Units are [grams/liter] and {lbs-VOC/lbs-solids} and {lbs-VHAP/lbs-solids} for NESHAPs
Values in () are years future standards are implemented

Table II (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Rule/Measure	Rule/Measure				
	South Coast AQMD Rule 1136 6/14/96	Mojave Desert AQMD Rule 1114 11/25/96	SJUAPCD Rule 4606 12/19/96	BAAQMD Reg 8 Rule 32 6/19/96	San Diego County APCD Rule 67.11 8/13/97
Exemption: Low usage	The VOC content coating and stripper requirements and transfer efficiency requirements shall not apply to facilities that use less than one gallon per day of coating, as applied.	The VOC content of coating and adhesive requirements and transfer efficiency requirements do not apply to facilities that use less than one gallon per day	The provisions of the rule shall not apply to: Wood products coating operations that use a total of less than 20 gallons of coating per year	Small Coating Operations: The provisions of this Rule shall not apply to facilities that use a total of less than 20 gallons of coating per year.	The provisions of the standards, control equipment, and recordkeeping shall not apply to the following: A stationary source which applies less than 500 gallons of coatings to wood products in every consecutive twelve-month period. It shall be the responsibility of any person claiming this exemption to maintain monthly purchase and monthly or daily usage records. These records shall be maintained on-site for three years and made available to the District upon request

Table II (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Rule/Measure	Rule/Measure				
	South Coast AQMD Rule 1136 6/14/96	Mojave Desert AQMD Rule 1114 11/25/96	SJUAPCD Rule 4606 12/19/96	BAAQMD Reg 8 Rule 32 6/19/96	San Diego County APCD Rule 67.11 8/13/97
Exemption: Low emission level		<p>The VOC content of coating and adhesive requirements and transfer efficiency requirements do not apply to coatings that emit not more than 3 pounds of VOC per day and not more than 200 pounds of VOC per year</p> <p>The current limits for VOC coatings and adhesives shall not apply to:</p> <p>a) operations which emit not more than 3 lbs. VOC/hr, before C.E.</p> <p>b) operations which emit not more than 15 lbs VOC/day, before C.E.</p> <p>c) facilities that do not exceed 10 tons/yr theoretical potential emissions</p>		Recordkeeping exemption for low VOC facilities. Low VOC coatings are high solid coatings with a VOC content of no more than [275] and low-solid coating with VOC limit no more than [120]	

Table II (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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Exemption: application equipment	<p>Notwithstanding the transfer efficiency requirements a person or facility may use:</p> <p>(A) any spray equipment that uses only coatings that comply with the July 1, 2005 VOC limits; or B) any spray equipment, except conventional air spray, that uses only coatings that contain 550 grams, or less, of VOC per liter of coating, less water and less exempt compounds.</p> <p>The transfer efficiency requirements shall not apply to air brushes with a capacity of four fluid ounces, or less</p>	<p>In spite of the VOC content coating and adhesive requirements a facility may use</p> <p>a) spray equipment that uses only coatings that comply with the 2005 VOC content limits</p> <p>b) spray equipment, except conventional air spray, that uses only coatings that contain 550 g/l, or less, of VOC content</p>		<p>Polyester Resin Application: The application of polyester resin with a VOC content of less than 120 grams VOC per liter (1.0 pound VOC per gallon) shall be exempt from the spray application equipment limitations</p>	<p>The provisions of the standards for application equipment shall not apply to the following: Any coatings when applied by the use of air brushes with a coating capacity of two ounces (59.1 ml) or less.</p>

Table II (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Rule/Measure	Rule/Measure				
	South Coast AQMD Rule 1136 6/14/96	Mojave Desert AQMD Rule 1114 11/25/96	SJUAPCD Rule 4606 12/19/96	BAAQMD Reg 8 Rule 32 6/19/96	San Diego County APCD Rule 67.11 8/13/97
Exemption: Aerosol cans	The provisions of this rule shall not apply to aerosol coating products.	The VOC content of coating and adhesive requirements and transfer efficiency requirements do not apply to the use of aerosol coating products	The provisions of the rule shall not apply to: Aerosol-spray coatings for touch up and repair	The provisions of this Rule shall not apply to the following specific coating operations: Coating applied from aerosol cans subject to the provisions of Regulation 8, Rule 49	The provisions of the standards, control equipment, and recordkeeping shall not apply to the following: Coatings applied using non-refillable handheld aerosol spray containers.
Exemption: Wood guitars	The VOC limits for coatings and the C.E. option shall not apply to the manufacturing of classic guitars until July 1, 2005.		The provisions of the rule shall not apply to: The application of coatings to wooden musical instruments	Musical Instruments: The provisions of this Rule shall not apply to the application of coatings to musical instruments	The VOC limits for new wood products and refinished wood products shall not apply to coatings applied to wooden musical instruments
Exemption: Touch-up and repair/ Stencil coatings	The VOC content of coatings and strippers requirements shall not apply to touch-up and repair coatings until July 1, 2005.	VOC content of coatings and adhesives shall not apply to refinishing operations or touch-up and repair or stencil coatings	The provisions of the rule shall not apply to: The application of coatings by template in order to add designs, letters, or numbers to wood products	Stencil Coatings: The provisions of this Rule shall not apply to the application of coatings by template in order to add designs, letters or numbers to products. The application of stencil coatings is subject to the provisions of Regulation 8 Rule 4.	The provisions of the standards for application equipment shall not apply to the following: (ii) Any coatings when applied during touch-up operations.

Table II (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Rule/Measure	Rule/Measure				
	South Coast AQMD Rule 1136 6/14/96	Mojave Desert AQMD Rule 1114 11/25/96	SJUAPCD Rule 4606 12/19/96	BAAQMD Reg 8 Rule 32 6/19/96	San Diego County APCD Rule 67.11 8/13/97
Exemption: Refinishing operations	Refinishing, Replacement, and Custom Replica Furniture Operations: Until July 1, 1998, the VOC limits for coatings and the C.E. option shall not apply to any refinishing operations necessary for preservation, to return the wood product to original condition, to replace missing furniture to produce a matching set, or to produce custom replica furniture, provided records are maintained daily for two years as to the amount, type and VOC content of each coating used.		Refinishing, Replacement, and Custom Replica Furniture Operations: The VOC limits, control requirements, and application equipment requirements shall not apply to any refinishing operation necessary for preservation, for returning the wood product to original condition, for replacing missing furniture to complete a matching set, or for producing custom replica furniture, provided records are maintained.	Refinishing, Replacement and Custom Replica Furniture Operations: The provisions of the general wood product limits; the furniture, custom cabinetry and custom architectural millwork limits; and the custom and contract furniture limits shall not apply to any refinishing operation necessary for preservation, to return the wood product or furniture to original condition, to replace missing furniture to produce a matching set , or to produce custom replica furniture.	

Table II (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Rule/Measure	Rule/Measure				
	South Coast AQMD Rule 1136 6/14/96	Mojave Desert AQMD Rule 1114 11/25/96	SJUAPCD Rule 4606 12/19/96	BAAQMD Reg 8 Rule 32 6/19/96	San Diego County APCD Rule 67.11 8/13/97
Exemption: Specific Finishes			Specific Finishes: The VOC limits, control requirements, and application equipment requirements shall not apply to coatings used to produce the following finishes, provided records are maintained as specified in Section 6.1.1: 4.4.1 Crackle lacquers. 4.4.2 Faux finishes. 4.4.3 Imitation wood grain. 4.4.4 Leaf Finishes.	Specific Finishes: The provisions of spray application equipment; custom cabinetry and custom architectural millwork, general wood product limits; custom and contract furniture limits shall not apply to coatings used to produce the following finishes, provided records are maintained as specified in Section 8-32-501: 115.1 Crackle lacquers 115.2 Leaf finishes 115.3 Faux finishes 115.4 Imitation wood grain The application of coatings used to produce these specific finishes is subject to the provisions of Regulation 8, Rule 4.	

Table II (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Rule/Measure	Rule/Measure				
	South Coast AQMD Rule 1136 6/14/96	Mojave Desert AQMD Rule 1114 11/25/96	SJUAPCD Rule 4606 12/19/96	BAAQMD Reg 8 Rule 32 6/19/96	San Diego County APCD Rule 67.11 8/13/97
Exemption: recordkeeping	Notwithstanding the requirements of Rule 109(c)(1), Recordkeeping for Volatile Organic Compound Emissions, any facility that switches to waterborne coatings that meet the July 1, 2005 VOC limits may request written approval from the Executive Officer to record data on up to a quarterly basis, provided the Executive Officer determines that such recordkeeping allows for an equivalent level of enforceability.	Any facility claiming to be exempt still has to meet the recordkeeping requirements			
Exemptions: Other	The VOC content requirements for coatings and strippers shall not apply to japans, provided the VOC content is 700 grams of VOC per liter of coating, less water and exempt compounds, or less, as applied. Notwithstanding the VOC content requirements for coatings and strippers, a		Residential noncommercial operations. Any source which is subject to the evaporative loss minimization requirements of this rule shall be exempt from otherwise applicable portions of Rule 4661 (Organic Solvents). For existing facilities, if an	Patternmaking: The provisions of this Rule shall not apply to the application of coating to wood patterns used as tooling for the foundry industry. See Reg 8 Rule 4 Extreme Environmental Conditions: Any wood product subject to the extreme environmental	.

Table II (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Rule/Measure	Rule/Measure				
	South Coast AQMD Rule 1136 6/14/96	Mojave Desert AQMD Rule 1114 11/25/96	SJUAPCD Rule 4606 12/19/96	BAAQMD Reg 8 Rule 32 6/19/96	San Diego County APCD Rule 67.11 8/13/97
	<p>person or facility may add up to 10% by volume of VOC to a topcoat, primer, sealer or undercoat to avoid blushing of the finish during high humidity provided that:</p> <p>A) the coating is not applied from April 1 to October 31 of any year; and , B) the coating contains acetone and no more than 550 grams of VOC per liter of coating, less water and exempt and exempt compounds, prior to the addition of VOC</p>		<p>incineration device is added or modified for the sole purpose of complying with the requirements of this rule, such a device shall be exempt from the Best Available Control Technology and the Offset requirements of Rule 2201 (New and Modified Stationary Source Review Rule) provided that:</p> <p>The proposed project will not result in an increase in capacity utilization of the unit being controlled The facility operator demonstrates to the satisfaction of the APCO that the proposed project is environmentally beneficial and will not cause or contribute to any violation of a national ambient air quality standard (NAAQS), prevention of significant deterioration (PSD) increment, or air quality related value (AQRV) in a class I area</p>	<p>conditions may be coated pursuant to the custom cabinetry and custom architectural millwork limits</p>	

Table II (1 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

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	South Coast AQMD Rule 1136 6/14/96	Mojave Desert AQMD Rule 1114 11/25/96	SJUAPCD Rule 4606 12/19/96	BAAQMD Reg 8 Rule 32 6/19/96	San Diego County APCD Rule 67.11 8/13/97
Applicability	The purpose of Rule 1136 is to reduce volatile organic compounds (VOC) emissions from the application of coatings or strippers to, and surface preparation of, any wood products, including furniture, cabinets, shutters, frames and toys. This rule shall not apply to residential noncommercial operations.	This Rule applies to wood product coating operations within the Mojave Desert Air Quality Management District.	The provisions of this rule shall apply to the application of coatings to and surface preparation of wood products, including furniture, cabinets, and custom replica furniture.	The purpose of this Rule is to limit emissions of volatile organic compounds from the application of coatings to, and surface preparation of, any wood products, including furniture, cabinets and custom architectural millwork. This Rule shall not apply to residential noncommercial operations.	1.Except as otherwise provided in Section (b), this rule is applicable to all wood products coating operations. 2 .Any coating operation subject to the requirements of Rules 67.0 or 67.18 shall not be subject to this rule. 3.Rule 66 shall not apply to any coating operation which is subject to this rule.
Comments					

Table II (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Rule/Measure	Rule/Measure				
	Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC=VOC	CTG 9/27/96	NESHAP 12/7/95 *all limits except strippers are VHAP		
Exemption: Low usage			Not applicable to sources under the following limits, however records must be maintained to demonstrate low usage limits: -less than 250 gal/month, or materials other than used for wood furniture manufacturing, if finishing materials, adhesives, cleaning solvents, and washoff solvents account for at least 90% of annual emissions -no more than 100 gallons per month of wood furniture coatings and adhesives are used -no more than 3,000 gals. Pr rolling 12 month ave. Including no more than 5 tons per rolling 12 month period of any one HAP or 12.5 tons per rolling 12 month period of any combination of HAP		

Note: Units are [grams/liter] and {lbs-VOC/lbs-solids}

Table II (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Rule/Measure	Rule/Measure				
	Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC=VOC	CTG 9/27/96	NESHAP 12/7/95 *all limits except strippers are VHAP		
Exemption: Low emission level	The ROC limits for new wood products, refinished wood products, and strippers; and application equipment requirements, and surface preparation and clean-up shall not apply to stationary sources emitting less than 200 pounds of ROC per rolling 12 month period from coatings, thinners, solvents and any ROC containing materials used *in wood product coating application operations. Any person claiming this exemption shall maintain monthly records to substantiate this claim. Emissions from aerosol products and degreasing units subject to Rule 74.6.1, 74.6.2 and/or 74.6.3 shall not be included in this determination.				

Note: Units are [grams/liter] and {lbs-VOC/lbs-solids}

Table II (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Rule/Measure	Rule/Measure				
	Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC=VOC	CTG 9/27/96	NESHAP 12/7/95 *all limits except strippers are VHAP		
Exemption: Application equipment					
Exemption: Aerosol cans	The provisions of this rule shall not apply to aerosol coating products.				
Exemption: Wood Guitars	The ROC limits for new wood products and refinished wood products for Pigmented Coatings, Fillers, Washcoats, Sealers and Clear Topcoats shall not apply to the coating of wooden musical instruments.				
Exemption: Touch-up and repair/Stencil coatings					
Exemption: Refinishing operations					
Exemption: Specific finishes					
Exemption:					

Note: Units are [grams/liter] and {lbs-VOC/lbs-solids}

Table II (2 of 2)
Identification of Performance Standards
Source Category: Wood Product Coatings

Rule/Measure	Rule/Measure				
	Ventura County APCD Rule 74.30 9/10/96 *This rule controls ROC in lieu of VOC, but states in definitions ROC=VOC	CTG 9/27/96	NESHAP 12/7/95 *all limits except strippers are VHAP		
Recordkeeping					
Exemption: Other	This rule shall not apply to the coating of permanently installed building appurtenances such as cabinets, shutters, fences and handrails, except new appurtenances upon initial installation.		Research or laboratory facilities		
Applicability	The provisions of this rule apply to any person who manufactures, supplies, uses, or specifies the use of wood products coatings for commercial use.	Wood furniture manufacturer in a non-attainment area that emits: - PTE 25 tpy VOCs for marginal, moderate, serious or severe -PTE 10 tpy VOCs for extreme	Wood manufacturing facilities that emit or have the potential to emit 10 tons or more of any HAP or 25 tons or more of any combination of HAP		
Comments					

Note: Units are [grams/liter] and {lbs-VOC/lbs-solids}